

NPDES PHASE II STORMWATER QUALITY MANAGEMENT PLAN (SWQMP) PART C: PROGRAM IMPLEMENTATION

NOVEMBER 5, 2008 UPDATE

Prepared for:

Hamilton County, Indiana Town of Cicero, Indiana PERMIT #INR040066

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1.0 INTRODUCTION

As part of the 1987 amendments to the federal Clean Water Act (CWA), the United States Congress added Chapter 402(p) to the CWA to address the water quality impacts of stormwater discharges from industrial facilities and large to medium municipal separate storm sewer systems (MS4s). Large to medium MS4s were defined as communities serving populations of 100,000 or more and are regulated by the Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System's (NPDES) Stormwater Phase I Program.

In addition to these amendments, Congress directed the Environmental Protection Agency (EPA) to issue further regulations to identify and regulate additional stormwater discharges that were considered to be contributing to national water quality impairments. On December 8, 1999, the EPA issued regulations that expanded the existing NPDES Stormwater Program to include discharges from small MS4s in "urbanized areas" serving populations of less than 100,000 and stormwater discharges from construction activities that disturb more than 1 acre of land. These regulations are referred to as the NPDES Phase II Stormwater Program. The urbanized area portion of Hamilton County met these criteria and was consequently designated as an MS4 entity.

In the State of Indiana, the Indiana Department of Environmental Management (IDEM) is responsible for the development and oversight of the NPDES Phase II Program. The IDEM initiated adoption of the Phase II Rules that were ultimately codified as 327 IAC 15-13 (Rule 13). Rule 13 became effective on August 6, 2003 and requires designated MS4 entities to apply for permit coverage by submitting a Notice of Intent (NOI) and developing Stormwater Quality Management Plans (SWQMPs) through a phased submittal process. The IDEM's phased submittal requirements for the SWQMP include the following 3 components:

- Part A: Initial Application
- Part B: Baseline Characterization Report
- Part C: Program Implementation Plan

All MS4s were required to submit NOI and SWQMP Part A documents to the IDEM by November 5, 2003. SWQMP Part B and Part C documents were required to be submitted by May 3, 2004 and November 5, 2004, respectively, unless MS4 communities filed for and were granted extensions by the IDEM. By fulfilling these timeline requirements MS4 communities were issued NPDES Permits that were valid from November 5, 2003 through November 5, 2008.

When submitting initial NOI and SWQMP documentation, designated entities had 3 potential permitting options. Under the first option a community could file individually for a general permit and would be solely responsible for implementing all stormwater requirements as outlined in Rule 13. Under the second option, a community could file individually for general permit coverage, but could chose to work together with other MS4's to fulfill certain regulatory requirements via legally binding agreements. Under

the third option, commonly referred to as "Co-Permitting," multiple communities could file for coverage under a single joint permit. Co-Permitting was only allowed if cooperating communities agreed to coordinate on the implementation of 1 or more of the responsibilities of Rule 13 together via legally binding agreements that outline individual requirements for each MS4 in implementing their Stormwater Program.

During the first permit term, Hamilton County, the City of Carmel, and the Town of Cicero operated under a joint permit (NPDES Permit INR040066). However, as the first permit term came to a close, the City of Carmel decided to seek coverage individually under its own NPDES general permit. The request was approved by the IDEM, and in September of 2008 Carmel filed an initial NOI and SWQMP Part A to the IDEM and was issued their own NPDES Permit Number (INR040150).

Despite Carmel's decision to seek individual coverage under a general permit, Hamilton County and the Town of Cicero have decided to continue to work as Co-Permittees to fulfill the requirements of Rule 13. Throughout this document the phrase "the Co-Permittees" will be used to refer to both entities. The Co-Permittees' renewal NOI and SWQMP Part A documents were submitted to IDEM on September 9 2008.

This report has been prepared to address Rule 13 requirements for completing the SWQMP Part C: Program Implementation Report, its corresponding certification form, and certification forms for each of the 6 Minimum Control Measures (MCMs). This report includes the following information:

- An initial evaluation of the Stormwater Program for the Co-Permittees' MS4 Area, including information on all known structural and nonstructural stormwater BMPs utilized,
- A detailed program description for each of the 6 MCMs, including measurable goals with results that are related to an environmental benefit and Programmatic Indicators,
- A timetable for program implementation milestone, which includes milestones for each of the 6 MCMs,
- SWQMP-Part B: Baseline Characterization Report conclusions (BMP recommendations, additional protective measures for sensitive areas, and correcting identified water quality problems),
- A narrative and mapped description of the MS4 Area boundaries that indicate responsible MS4 entity areas for each MCM, including specific (sectional/street) boundaries of the MS4 Area,
- An estimate of the linear feet of MS4 conveyances within the MS4 Area, segregated by MS4 type, including open ditch and pipe,
- A summary of which structural BMP types will be allowed in new development and redevelopment for the MS4 Area,
- A summary of the stormwater structural BMP selection criteria and, where appropriate, associated performance standards that must be met after installation to indicate BMP effectiveness, and



• A summary of the current stormwater budget, funding source, and a projection of the budget for each year within the 5- year permit term.

In addition, the IDEM's SWQMP Part C: Program Implementation Report Certification Checklist and certification forms for each of the 6 MCMs are included in **Appendices 5** through **11** of this report.

2.0 MS4 AREA DESCRIPTION

Rule 13 requires a narrative and mapped description of the MS4 Area boundaries and an estimate of the linear feet of MS4 conveyances within the MS4 Area. The following discussion provides an evaluation the municipal stormwater conveyance system within the Co-Permittees' MS4 Area. A map of the MS4 Area boundaries is **Exhibit 1** of this report.

2.1 NARRATIVE DESCRIPTION OF MS4 AREA

For all Minimum Control Measures (MCM) with the exception of the Illicit Discharge Detection and Elimination (IDDE) MCM, the MS4 Area covered by this permit (herein referred to as Co-Permittee MS4 Area) includes all unincorporated areas of Washington, Delaware, Clay, Noblesville, Wayne, Adams, Whiter River, Fall Creek, and Jackson Township, including the Town of Cicero's incorporated area. The IDDE MCM will only be implemented within unincorporated areas of the County that are located within the Urbanized Area Boundary and within the Town of Cicero's incorporated area. **Exhibit 1** identifies the Co-Permittees' MS4 Area.

The Notice of Intent (NOI) and Stormwater Quality Management Plan (SWQMP) Part A: Renewal Application identified known receiving waters to which the MS4 entities directly discharge stormwater. Since that submittal, the Co-Permittees have slightly amended that list. The receiving waters shown in **Table 2-1** include all known Co-Permittee MS4 Area receiving waters.

Table 2-1
Co-Permittee MS4 Area Receiving Waters

Entity	Receiving Water
Hamilton County	Bear Creek
Hamilton County	Ames Run
Hamilton County	Bill's Run
Hamilton County	Fall Creek
Hamilton County	Blue Woods Creek
Hamilton County	Flatfork Creek
Hamilton County	Mount Zion Branch
Hamilton County	Taylor Creek
Hamilton County	Thor Run
Hamilton County	Thorpe Creek
Hamilton County	Well Run
Hamilton County	Wheeler and Wheeler
Hamilton County	White River
Hamilton County	Woodruff Branch
Hamilton County	Cicero Creek
Hamilton County	East Fork Sly Run

Entity	Receiving Water
Hamilton County	Bear Slide Creek
Hamilton County	Hinkle Creek
Town of Cicero	Little Cicero Creek
Town of Cicero	Morse Reservoir
Hamilton County	Mud Creek
Hamilton County	Sand Creek
Hamilton County	Springmill Run
Hamilton County	Stony Creek
Hamilton County	Thomas Hussey
Hamilton County	Grassy Branch
Hamilton County	JM Wagner
Hamilton County	John Underwood
Hamilton County	Kirkendall Creek
Hamilton County	Long Branch
Hamilton County	Marion Blanton
Hamilton County	McMahon-Overdorf Branch
Hamilton County	Hoover Run
Hamilton County	Jones Ditch
Hamilton County	Cheeney Creek
Hamilton County	Clay Creek
Hamilton County	Bee Camp Creek
Hamilton County	FM Musselman
Hamilton County	Finley Creek
Hamilton County	Bills Branch
Hamilton County	Crooked Creek
Hamilton County	Delaware Creek
Hamilton County	Boone Creek
Hamilton County	Eagle Creek
Hamilton County	Williams Creek
Hamilton County	William Lehr Ditch
Hamilton County	William Lock Ditch
Hamilton County	Duck Creek
Hamilton County	Pipe Creek
Hamilton County	Lamberson Ditch
Hamilton County	Weasel Creek
Hamilton County	Kreager Ditch
Hamilton County	Lick Creek
Hamilton County	Little Eagle Creek
Hamilton County	Lion Creek
Hamilton County	Prairie Creek
Hamilton County	Geist Reservoir
Hamilton County	AF Ingerman Ditch

Entity	Receiving Water
Hamilton County	AJ Myers
Hamilton County	Center Creek
Hamilton County	Cool Creek
Hamilton County	Little Cool Creek
Hamilton County	Carmel Creek
Hamilton County	Eller Run
Hamilton County	Elliot Creek
Hamilton County	Grainger Ditch
Hamilton County	Henley Creek
Hamilton County	Hiway Run
Hamilton County	JW Hawkins
Hamilton County	Will Run

2.2 <u>DESCRIPTION OF MS4 CONVEYANCE SYSTEMS</u>

A conveyance is defined by the IDEM as any structural process for transferring stormwater between at least 2 points. The term includes piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains, roadside ditches. IDEM further defines MS4 conveyance systems as outfall conveyance systems with a pipe diameter of twelve (12) inches or larger and open ditches with a two foot or larger bottom width. Although this definition includes only the main trunks of pipes or open ditches that lead to each regulated outfall, mapping of the total conveyance system that would include tributaries to the main trunks would aid in illicit discharge detection and elimination efforts. **Table 2-2** and **Table 2-3** list the estimated linear feet of conveyance systems within the Co-Permittees' MS4 Area broken down by type and individual entity.

Table 2-2
Conveyance Systems Maintained by Hamilton County

Conveyance Type	Estimated Linear Feet of Conveyance	% of Total Conveyance System
Open Storm Drain	1,667,108 ft	26.3%
Enclosed Pipe	4,693,739 ft	73.7%
Total	6,360,847 ft	100%

Table 2-3
Conveyance Systems Maintained by the Town of Cicero

Conveyance Type	Estimated Linear Feet of	% of Total	
	Conveyance	Conveyance System	
Open Storm Drain	N/A	0%	
Enclosed Pipe	95,427 ft	100%	
Total	95,427 ft	100%	

2.3 Part B Conclusions and Priority Watersheds

The Rule 13 SWQMP-Part B required the identification of areas having reasonable potential for or actually causing stormwater quality problems based upon relevant land use data and identified sensitive areas, as well as, existing and available water quality data. These areas are required to be given the highest priority for the selection of BMPs and the prohibition of new or significantly increased MS4 discharges.

The Co-Permittees identified the County Highway Department Maintenance Facility and the Cicero Street and Utilities Department Maintenance Facility as specific locations requiring the implementation of structural BMPs in the their Part B submittal. As a result of this determination these facilities have been targeted for implementation of the following BMPs, which are discussed in detail in **Section 8.2**:

- Implementation of secondary containment devices
- Implementation of wash water management BMPs
- Implementation of chemical spill response plans

The Co-Permittees also identified urban and rural land uses as potential problem areas in their Part B submittal. In order to address potential water quality impacts associated with agricultural land use, the Co-Permittees will work with the Hamilton County Soil and Water Conservation District (SWCD) to provide educational outreach and assistance to agricultural landowners. This relationship is discussed in detail in **Section 3.2.** A copy of the Memorandum of Agreement (MOU) that the Hamilton County Commissioners and SWCD have entered into is included in **Appendix 3.**

Regarding urban land uses, the Co-Permittees recognize that the main goal of Rule 13 is to minimize the water quality impacts associated with stormwater runoff from small and medium sized MS4s in urbanized areas and is confident that the comprehensive list of BMPs identified in this plan will effectively minimize the impacts that urban land uses have on water quality.

The Part B submittal also identified over 30,000 acres of highly erodible soils within the Co-Permittees' MS4 Area. New and redevelopment occurring on these areas will likely be prioritized for site inspections as a part of the Co-Permittees' Construction Site Runoff Control Program. Priorities for construction activities are discussed in more detail in **Section 6.2**.

The Co-Permittees' Part B submittal also identified 21 priority watersheds. **Table 2-4** below summarizes watershed specific information and supports the selection of these watersheds as priorities for the Co-Permittees' Stormwater Program. An "X" in the "Multiple Impairments" column indicates that the referenced watershed is listed for more than one type of stormwater impairment. An "X" in the "Recreational Waterway" column indicates that a waterway within that watershed is utilized as a recreational waterway. An "X" in the "Drinking Water Source" column indicates that a waterway within the watershed is utilized as a surface water source or as a surface water supply

supplement. An "X" in the "Watershed Study" column indicates that a study identified this particular Co-Permittee watershed as an area of concern or priority.

Table 2-4 Priority Watershed Information

Watershed Name	Multiple Impairments	Recreational Waterway	Drinking Water Source	Watershed Study
Bear Creek – West Fork Bear Creek				X
Cool Creek – Grassy Branch/Little Cool Creek				х
Cox Ditch – Christy/Kirgin Ditch	X			X
Duck Creek – Lamberson Ditch	X			X
Duck- Creek - Long Branch				
Geist Reservoir – Bee Camp	X	X	X	
Little Cicero Creek - Bennett				x
Ditch/Taylor Creek				^
Little Cicero Creek - Teeter Branch				X
Morse Reservoir – Bear Slide Creek	X	X	X	
Stony Creek – North Trib	X			X
Stony Creek – William Lock Ditch	X			X
White River – Mallory Grainger Ditch	X	X		
White River - Perkinsville	X	X		
White River – Sugar Run	X	X		
White River – Shoe Maker Ditch		X	X	
White River – Dyer Creek		X		
White River – Vestal Ditch/Michener		x		
Ditch		^		
White River – Haverstick Creek		X		
White River – Carmel Creek		X		
Mud Creek – Headwaters				X
Mud Creek – Sand Creek				X

In the event that future funding for implementation of the Stormwater Program becomes strained, the Co-Permittees will focus program implementation towards priority watersheds identified in their Part B submittal. However, as long as adequate funding is available the Co-Permittees will consider all watersheds within their MS4 Area to be priorities.

3.0 MINIMUM CONTROL MEASURE #1 PUBLIC EDUCATION AND OUTREACH

Rule 13 requires that residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel within the MS4 Area be informed about the impacts that polluted stormwater runoff have on water quality and ways they can minimize their impact on stormwater quality. A reasonable attempt must be made to reach all constituents within the MS4 Area. An initial assessment of the MS4 Area constituents must be conducted to determine initial constituent knowledge and practices as they relate to stormwater quality. The following discussion provides information on the Co-Permittees' Public Education and Outreach Program.

3.1 EXISTING PUBLIC EDUCATION AND OUTREACH BMPs

Compliance with this MCM requires MS4s to demonstrate that residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel within the MS4 are educated about the impacts of polluted stormwater runoff on MS4 Area receiving streams.

During the first permit term the Co-Permittees made great progress in implementing Public Education and Outreach BMPs and have submitted Annual Reports to IDEM highlighting key program implementation activities that have occurred. Existing Public Education and Outreach programs and activities performed by Co-Permittees are discussed below.

Hamilton County Phase II Public Education Committee

The Hamilton County Phase II communities of Hamilton County, City of Carmel, Town of Cicero, City of Noblesville, City of Westfield and the Town of Arcadia have developed a partnership called the Hamilton County Phase II Public Education Steering Committee. The Committee's purpose is to develop and implement Public Education and Outreach and Public Participation and Involvement programs and activities throughout Hamilton County that are consistent and complimentary in nature. The Steering Committee has met regularly throughout the permit term. Among other things the Committee has distributed educational brochures at numerous local events such as the County Fair, they have also developed Public Service Announcements (PSAs) for display at local theaters, distributed temporary tattoos, and purchased tributary signage.

Public Service Announcements

As part of the Public Education Committee's efforts to increase stormwater awareness, Public Service Announcements (PSAs) were shown in 2 local theaters. In total the PSAs played more than 14,280 times on movie screens and in theater lobbies.

Public Meetings

In the spring of 2007, a stormwater workshop was held to educate builders and developers about erosion control. In February of 2007, the Hamilton County Surveyor



spoke to more than 40 residents at the Carmel Golden K Kiwanis Club luncheon in Carmel, Indiana about the Phase II Stormwater Program. In addition, throughout the permit term the Phase II Education Committee has been active in promoting and coordinating the annual "Keep it Clean" Stormwater Workshop.

Stormwater Brochures and Handouts

The Hamilton County Phase II Public Education Steering Committee has developed and distributed stormwater brochures designed to educate residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel about the impacts polluted stormwater runoff can have on water quality and the ways in which each constituency can minimize their impacts on stormwater quality. Among other things, the brochures include targeted outreach information on erosion and sediment control practices, illicit connections to the storm sewer system, improperly functioning septic systems, Household Hazardous Waste services, and Report-A-Polluter Programs. Brochures have been disseminated via mass mailings, at local places of business, at City, Town, and County offices, and at various local events. In 2007 alone, 1,000 4x6" post-card sized flyers were distributed to the Hamilton County Humane Society for distribution with new pet adoptions. The Health Department sent approximately 143 septic information packets to those scheduling soils appointments for both new construction and repair jobs and approximately 100 maintenance letters to those who installed systems 3-4 years ago.

Newsletter Articles/Mass Media

The Hamilton County Soil and Water Conservation District (SWCD) and the Hamilton County Parks, publish and disseminate quarterly newsletters entitled *Town & Country* and the *Chatterbox*. The *Town and Country* is received by over 2,000 people and the *Chatterbox* is received by over 7,000. These newsletters include a variety of information on agricultural programs, conservation practices, and erosion and sediment control practices as well as stormwater runoff and pollution prevention information. These newsletter's include articles that discuss various stormwater topics such as, erosion and sediment control measures, agricultural issues related to stormwater quality, opportunities for citizens to get involved with stormwater events such as community clean up events and storm drain marking events, and other relevant information designed to enhance the urban and rural community's understanding of stormwater issues. The Hamilton County Public Education Steering Committee has provided information for these articles.

Stormwater Website

The Co-Permittees have developed individual stormwater websites. The County website has continued to be updated to better inform the residents, public service employees, commercial and industrial facilities, and construction site personnel about the impacts polluted stormwater runoff have on water quality and the ways in which each constituency can minimize their impacts on stormwater quality. The County website (www.co.hamilton.in.us/cleanwater) provides dates, times, and sponsors of stormwater related events such as workshops, clean-up events, and public meetings. The County website also includes copies of the Co-Permittees SWQMP, stormwater related

ordinances, and other relevant information including meeting minutes. The County website includes a counter to track the number of "hits" the site receives. The Town of Cicero's website (www.ciceroin.com.org/streetutil.htm) also provides citizens with information on stormwater issues. The website provides information on construction standards, stormwater contact numbers, as well as links to the Hamilton County Stormwater Website, and a mechanism for reporting suspected pollution problems.

Household Hazardous Waste and Recycling Program Promotions

In order to educate community members on the importance of pollution prevention and recycling programs, the Hamilton County Phase II Public Education Steering Committee frequently advertises and promotes the activities and services of the Household Hazardous Waste (HHW) facility operated by the Hamilton County Solid Waste Management District. The Hamilton County HHW facility distributes a variety of educational brochures related to proper disposal of hazardous wastes and conducts a variety of educational programs for local schools and civic groups. The Hamilton County Emergency Management Agency, in conjunction with the Hamilton County Local Emergency Planning Committee (LEPC), has developed and is distributing an educational brochure addressing the proper use, disposal, and recycling of common household products. The Hamilton County Health Department and the Hamilton County Household Hazardous Waste Program have ongoing public education programs involving pollution prevention and regularly promote Household Hazardous Waste services and educational programs for children as well as adults.

Soil and Water Conservation Activities

The SWCD includes articles in their quarterly newsletter, Town & Country, on some of the following issues, erosion and sediment control practices, agricultural issues related to stormwater quality, and opportunities for citizens to get involved with stormwater events such as community clean up and storm drain marking programs

3.2 PROPOSED PUBLIC EDUCATION AND OUTREACH BMPs

In an effort to form a regional stormwater education partnership, the Town of Arcadia, the City of Westfield, the City of Noblesville, the City of Carmel, and the Co-Permittees have formed the Hamilton County Phase II Public Education Steering Committee. The Steering Committee's purpose is to develop and implement Public Education and Outreach and Public Participation and Involvement programs and activities throughout Hamilton County that are consistent and complimentary in nature.

In order to ensure the successful development and implementation of Public Education and Outreach and Public Participation and Involvement Programs in compliance with Rule 13, the Co-Permittees and the communities listed above have entered into a Memorandum of Understanding (MOU). A fully executed copy of the MOU is included in **Appendix 4** of this report. The Town of Fishers is also actively participating with the Steering Committee, although they have not signed the MOU as of submittal time. If for any reason, the Co-Permittees decide that the terms of the MOU are no longer in their

best interest, they will terminate the agreement and will be responsible for implementing and/or revising the Public Education and Outreach and Public Participation and Involvement BMPs as outlined below.

Table 3-1 provides a summary of the Education and Outreach BMPs to be implemented and identifies the measurable goals, timelines, documentation and tracking needs, and responsible parties associated with each BMP. A detailed description of each BMP is provided below.

Hamilton County Phase II Public Education Steering Committee

To ensure the effective development and implementation of Public Education and Outreach programs and activities, Hamilton County Phase II communities (Hamilton County, the City of Carmel, the Town of Cicero, the City of Noblesville, the Town of Westfield, and the Town of Arcadia) formed a partnership called the Hamilton County Phase II Public Education Steering Committee. The Steering Committee will meet as needed throughout the second permit term. The Co-Permittees will document the number and description of each meeting, the number in attendance at each meeting, as well all progress made by the Steering Committee in their annual SWQMP report.

While committed to carrying out the BMPs outlined in this plan, the Hamilton County Public Education Steering Committee and the Co-Permittees will continue to identify new methods and opportunities for educating local residents throughout this permit term. In the event that educational BMPs besides those listed in this plan are implemented during this permit term, the Co-Permittees will report them to IDEM in annual SWQMP reports as either additions or substitutions to BMPs listed in this plan.

Public Meetings

In July and August of 2004, 3 Public Meetings were held in Hamilton County (July 8, 2004), Cicero (July, 14, 2004), and Carmel (August 4, 2004) to discuss the development of the Co-Permittees' Stormwater Quality Management Plan (SWQMP). The purpose of the meetings was to educate citizens on the impacts that their daily activities have on stormwater quality, to solicit public input on the development of the SWQMP, and to solicit public participation in the implementation of the SWQMP. All meetings complied with applicable public notice requirements, and were also advertised via local websites, utility bill inserts, media releases, and marquees. Similar meetings will be held throughout the remainder of the second permit term. The Co-Permittees will document the total number of meetings held and the attendance at each meeting. Meeting minutes will also be recorded. This information will be included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will facilitate future meetings. In the event that they do not, the Co-Permittees will ensure that public meetings addressing stormwater quality are developed and implemented within the Co-Permittees' MS4 Area.

Stormwater Survey

The Co-Permittees developed a Stormwater Quality Survey in July of 2004 to assess the public's initial knowledge and understanding of stormwater issues and to assist them in developing a public education program that is as efficient and effective as possible. During the months of July through October 2004 staff from Hamilton County, and the Town of Cicero distributed the Stormwater Quality Survey at local events including the Hamilton County 4-H Fair (July 29-30, 2004), a Builders Meeting conducted in the Town of Cicero (July 30, 2004), and a Neighborhood Association Network Meeting (August 19, 2004). The Survey was also distributed to public employees. Survey results were compiled during December of 2004 and were evaluated in January of 2005. The results will be used to better target future education and outreach programs and activities. Co-Permittee residents will be surveyed again in the future to evaluate and monitor the effectiveness of the Co-Permittees' stormwater education program. Surveys will likely be distributed during local events, at public meetings, via stormwater websites, and as inserts to local utility bills.

Stormwater Brochures

The Hamilton County Phase II Public Education Steering Committee will develop and distribute stormwater brochures designed to educate residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel about the impacts polluted stormwater runoff can have on water quality and the ways in which each constituency can minimize their impacts on stormwater quality. Among other things, the brochures will include targeted outreach information on erosion and sediment control practices, illicit connections to the storm sewer system, improperly functioning septic systems, Household Hazardous Waste services, and Report-A-Polluter Programs. Additional brochures will be developed as topics and targeted activities necessitate them. Brochures will likely be disseminated via mass mailings, at local places of business, Town and County offices, and at various local events. Members of the Hamilton County Phase II Public Education Steering Committee will develop and help disseminate the brochures. Copies of the brochures along with the total number of brochures distributed will be documented and included in the Co-Permittees' annual SWQMP report.

The Co-Permittees' anticipate that the Hamilton County Phase II Public Education Steering Committee will develop these brochures. In the event that they do not, the Co-Permittees' will ensure that stormwater brochures are developed and distributed as outlined above.

Newsletter Articles

The Hamilton County Soil and Water Conservation District (SWCD) currently publishes and disseminates a quarterly newsletter entitled *Town & Country*. The newsletter includes a variety of information on agricultural programs, conservation practices, and erosion and sediment control practices. In addition, City of Westfield, the Hamilton County Parks Department, and various other local organizations publish newsletters, which are designed to keep citizens informed on a variety of local programs, activities, and events. These newsletter's will now include articles that discuss various

stormwater topics such as, erosion and sediment control measures, agricultural issues related to stormwater quality, opportunities for citizens to get involved with stormwater events such as community clean up events and storm drain marking events, and other relevant information designed to enhance the urban and rural community's understanding of stormwater issues. The Hamilton County Public Education Steering Committee will be responsible for drafting these articles. The Co-Permittees' will document the total number of articles published, the topics of each article, and the total number of newsletters disseminated.

The Co-Permittees' anticipate that the Hamilton County Phase II Public Education Steering Committee will develop these articles. In the event that they do not, the Co-Permittees' will work with local newsletter publishers to incorporate stormwater articles into their respective newsletters.

Stormwater Website

The Co-Permittees have developed stormwater websites. The websites will continue to be updated and will be designed to educate residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel about the impacts polluted stormwater runoff have on water quality and the ways in which each constituency can minimize their impacts on stormwater quality. The websites will provide dates, times, and sponsors of stormwater related events such as workshops, clean-up events, and public meetings. The websites will include copies of the Co-Permittees' SWQMP, stormwater related ordinances, and other relevant information. The websites may also include a counter to track the number of "hits" the site receives. In addition, the websites will have an e-mail function by which citizens can ask question's or report problems regarding stormwater.

In addition, the Websites will also provide links to stormwater websites developed by other Stormwater Phase II Communities in Hamilton County and throughout the State of Indiana. As appropriate, the total number of "hits", along with any questions or comments received, and all responses to questions or comments will be documented and submitted with the Co-Permittees' annual SWQMP report.

Household Hazardous Waste and Recycling Program Promotions

In order to educate community members on the importance of pollution prevention and recycling programs, the Hamilton County Phase II Public Education Steering Committee will frequently advertise and promote the activities and services of the Household Hazardous Waste (HHW) Facility operated by the Hamilton County Solid Waste Management District. Effective advertisement will help minimize illegal dumping activities and improper disposal of household hazardous wastes. The Hamilton County HHW facility distributes a variety of educational brochures related to proper disposal of hazardous wastes and conducts a variety of educational programs for local schools and civic groups. Advertisements and promotions for these services will occur on stormwater websites and brochures to be developed as part of the Co-Permittees' SWQMP. The County HHW Facility currently tracks the amount of waste collected at its facility. All educational activities, programs, and literature conducted and distributed

and all waste collected will be documented and included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will advertise Household Hazardous Waste services. In the event that they do not, the Co-Permittees will promote and advertise those services as outlined above.

Soil and Water Conservation District (SWCD) Activities

Agricultural land uses account for approximately 79% of land uses within the Co-Permittees' MS4 Area. As concluded in Part B, to minimize potential impacts associated with agricultural land uses, agricultural producers need to be educated on and encouraged to use stormwater BMPs. The SWCD will encourage local agricultural producers to implement agricultural BMPs including, but not limited to, conservation tillage, nutrient and pesticide management, buffer strips, and wetland restoration. Dayto-day contacts with the agricultural community will be enhanced to include discussions on stormwater BMPs. The SWCD will include articles in their quarterly newsletter, *Town* & Country, on some of the following issues, erosion and sediment control practices, agricultural issues related to stormwater quality as discussed above, opportunities for citizens to get involved with stormwater events such as community clean up events and storm drain marking events, or other relevant stormwater information designed to enhance the urban and rural community's understanding of stormwater issues. In addition, the Hamilton County SWCD will continue to hold its annual erosion and sediment control workshops, which are designed to educate public employees and developers on erosion and sediment control practices. All program activities will be documented in the Co-Permittees' annual SWQMP report.

Mass Media Solicitation

Public Service Announcements (PSAs) have proven to be a very effective way to provide stormwater education to a large and diverse portion of the population. Local radio stations, TV stations, and newspapers will be contacted by the Hamilton County Phase II Public Education Steering Committee about the possibility of running stormwater quality PSAs. The Co-Permittees will track the number of PSAs produced and the number of airings and publications. As this activity progresses, details will be included with the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will conduct mass media solicitations. In the event that they do not, the Co-Permittees will contact local media outlets about the possibility of running stormwater PSAs.

Table 3-1
Public Education and Outreach BMPs

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Hamilton County Phase II Public Education Steering Committee	 Attend and participate in Steering Committee meetings to ensure the effective development and implementation of educational BMPs. 	Ongoing	 Document dates of meetings attended. Track attendees at each meeting. Record meeting minutes. Track financial contributions. Track with Programmatic Indicator #1, #2, and #3 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee
Public Meetings	Conduct additional public meetings to educate citizens on stormwater quality and to solicit participation in Stormwater Programs.	Ongoing.	 Document the date, time, attendance and outcome of each meeting. Record meeting minutes. Include checkboxes on all sign up sheets allowing attendees to classify themselves as residents, visitors, public service employees, commercial and industrial employees, or construction site employees. Track using Programmatic Indicators #1, #2, #3 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Stormwater Survey	 Utilize survey results to better target stormwater education and outreach and involvement activities. 	Ongoing	 Document the number of surveys distributed and methods used for distribution. Track survey responses. Track using Programmatic Indicators #1 and #2. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee
Stormwater Educational Brochures	 Develop and distribute stormwater brochures throughout the permit. 	Ongoing	 Document the total number of each brochure that is distributed and methods used to distribute them. Track using Programmatic Indicator #1. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee.
Stormwater Newsletters	Work with the SWCD and other local entities to publish stormwater articles in existing newsletters.	Ongoing	 Track number of articles printed, and the number of articles disseminated. Save a copy of each newsletter containing educational stormwater information for inclusion in annual reports. Track using Programmatic Indicator #1. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Stormwater Website	Update and maintain stormwater websites to educate constituents on their potential impacts to stormwater quality.	Ongoing	 Track the number of "hits" the site receives. Document all questions and comments received via the webpage. Document all responses made to questions and comments received. Track using Programmatic Indicator #1. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee.
HHW and Recycling Promotions	Promote the HHW facilities operated by the Hamilton County Solid Waste Management District.	Ongoing	 Continue to track the amount of material collected at the HHW Facility. Document dates, times, and attendance at all presentations to citizen and school groups that incorporate stormwater quality discussions. Track the number of stormwater brochures distributed on an annual basis. Track using indicator #2, #3, #10, #11, and #12. 	County Surveyor's Office Cicero Parks Department Hamilton County Solid Waste Management District Hamilton County Phase II Public Education Steering Committee

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Soil and Water Conservation District (SWCD) Activities	 Coordinate with the SWCD to: Publish stormwater articles in quarterly newsletters. Provide education and outreach programs targeted towards the agricultural community. Conduct annual erosion and sediment control trainings and workshops. 	Ongoing and annual activities	 Track number of stormwater related articles published. Track the number and type of educational programs and activities conducted targeting the agricultural community. Document dates, times, and attendance at all workshops/trainings focused on stormwater quality related issues. Track using Programmatic Indicator #1, #2, and #3 	County Surveyor's Office Cicero Parks Department Hamilton County SWCD
Mass Media Solicitation	 Contact local media outlets about running stormwater PSAs and articles. 	Ongoing	 Document number of contacts made and the number of stormwater articles or PSAs released per year. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee

4.0 MINIMUM CONTROL MEASURE #2 PUBLIC PARTICIPATION AND INVOLVEMENT

Rule 13 requires that documented opportunities are given to constituents within the MS4 Area to participate in the stormwater management program development and implementation. The MS4 entity must comply with public notice requirements to allow public comment. An initial assessment of MS4 Area constituents must be conducted to identify interested individuals for participation in the MS4 Area Stormwater Program.

4.1 EXISTING PUBLIC PARTICIPATION AND INVOLVEMENT BMPs

Compliance with this MCM requires MS4s to demonstrate that residents, visitors, public service employees, commercial and industrial facilities, and construction site personnel within the MS4 are educated about the impacts of polluted stormwater runoff on MS4 Area receiving waters.

During the first permit term the Co-Permittees made great progress in implementing Public Participation and Involvement BMPs and have submitted Annual Reports to IDEM highlighting key program implementation activities that have occurred. Existing Public Participation and Involvement programs and activities performed by Co-Permittees are discussed below.

Soil and Water Conservation Activities (Backyard Conservation Program)

In 2007, the Hamilton County Soil and Water Conservation District organized a group of local stakeholders to develop and help implement a county-wide Backyard Conservation Program. The Backyard Conservation Committee's goal is to increase homeowner education about urban backyard conservation of natural resources, to provide guidelines about possible backyard conservation practices applicable to Hamilton County, and to encourage the implementation of these practices. From this committee, 3 subcommittees have been formed: the Outreach Committee, Administration and Finance Committee, and Technical Assistance Committee. Throughout 2007, meetings that were held include an informational meeting to involve local stakeholders, 2 Steering Committee meetings, and 6 subcommittee meetings. Members of the committee include residents, business owners, government agency staff, and engineers.

Storm Drain Marking

All newly installed cast iron inlets in unincorporated Hamilton County and along County Regulated Drains in new construction include the message "Dump No Waste, Drains to River." All such curb inlets are mapped on the County's GIS maps. The Hamilton County Highway Department also has similar requirements for new construction. The Town of Cicero has coordinated with local groups to conduct storm drain marking programs throughout the Town.

Clean-up Events

Hamilton County and the Town of Cicero have participated in the planning, funding, and/or implementation of numerous community clean-up events including the annual Hamilton County White River Clean-up, the Cool Creek Park Clean-up, and the annual Morse Waterway Association Clean-up. In 2007 alone, the White River Clean-up event resulted in the removal of more than 10 tons of trash and debris from the White River.

Report-A-Polluter Program

In 2005 a Report-A-Polluter program was initiated, which provides citizens with an opportunity to notify local government officials of potential water quality concerns. An electronic form and emergency contact numbers are posted on the County Report-A-Polluter website. Six Report-A-Polluter forms were filled out and forwarded to the appropriate MS4 jurisdiction for follow-up during 2007. In addition, the Town of Cicero's website has a "Residents Speak Out" link which provides citizens with an opportunity to speak out on stormwater related issues.

4.2 PROPOSED PUBLIC PARTICIPATION AND INVOLVEMENT BMPs

As mentioned in Section 3.2, in an effort to form a regional stormwater education partnership, the Town of Arcadia, the City of Westfield, the City of Noblesville, the City of Carmel, and the Co-Permittees have formed the Hamilton County Phase II Public Education Steering Committee. The Committee's purpose is to develop and implement Public Education and Outreach and Public Participation and Involvement programs and activities throughout Hamilton County that are consistent and complimentary in nature.

In order to ensure the successful development and implementation of Public Education and Outreach and Public Participation and Involvement Programs in compliance with Rule 13, the Co-Permittees and the communities listed above have entered into a Memorandum of Understanding (MOU). A fully executed copy of the MOU is included in Appendix 4 of this report. The Town of Fishers is also actively participating with the Steering Committee, although they have not signed the MOU. If for any reason, the Co-Permittees decide that the terms of the MOU are no longer in their best interest, they will terminate the agreement and will be responsible for implementing and/or revising the Public Education and Outreach and Public Participation and Involvement BMPs as outlined below.

Reduction goal percentages associated with this MCM are correlated to the amount of constituent participation. Greater constituent participation will result in greater reductions in certain stormwater pollutants.

Table 4-1 provides a summary of the Public Participation and Involvement BMPs to be implemented and identifies the measurable goals, timelines, documentation and tracking needs, and responsible parties associated with each BMP. A detailed description of each BMP is provided below.

Hamilton County Phase II Public Education Steering Committee

To ensure the effective development and implementation of Public Education and Outreach programs and activities, Hamilton County Phase II communities (Hamilton County, the City of Carmel, the Town of Cicero, the City of Noblesville, the City of Westfield, and the Town of Arcadia) formed a partnership called the Hamilton County Phase II Public Education Steering Committee. The Steering Committee will meet as needed throughout the second permit term. The Co-Permittees will document the number and description of each meeting, the number in attendance at each meeting, as well all progress made by the Steering Committee in their annual SWQMP report.

While committed to carrying out the BMPs outlined in this plan, the Hamilton County Public Education Steering Committee and the Co-Permittees will continue to identify new methods and opportunities for educating local residents throughout this permit term. In the event that educational BMPs besides those listed in this plan are implemented during this permit term, the Co-Permittees will report them to IDEM in annual SWQMP reports as either additions or substitutions to BMPs listed in this plan.

Storm Drain Marking

The Hamilton County Public Education Steering Committee will organize and conduct storm drain marking activities. These events will increase citizen awareness of local Stormwater Programs through public participation. The Hamilton County Phase II Public Education Steering Committee will identify locations such as subdivisions, commercial parks, and other areas located in MS4 Areas throughout Hamilton County that warrant storm drain marking and will be tasked with coordinating and advertising these events and programs as well as identifying local volunteers and sponsors interested in participating in the programs. The Co-Permittees will document the number of volunteers that participate in storm drain marking events as well as the number and location of storm drains marked or cast. This information will be included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will organize and conduct storm drain activities. In the event that they do not, the Co-Permittees will organize and conduct storm drain marking activities within their MS4 Area.

Clean-Up Events

The Hamilton County Phase II Public Education Committee will assist various groups with administering annual community clean-up events. These events will increase citizen awareness of local Stormwater Programs through participation. The Steering Committee will identify locations (common areas, stream segments, etc.) throughout Hamilton County that warrant such activities. Clean-up events will occur in conjunction with "Earth Day", the "Great American Clean-Up", the County 4-H Fair, Carmel Fest, and/or the White River Clean-Up. The Steering Committee will promote and advertise these events and programs as well as identify local volunteers and sponsors interested in participating in the events. The Co-Permittees will document the number of volunteers that participate in these events, as well as, the amount of waste collected as

a result of these events. This information will be included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will assist local groups with administering local community clean-up events. In the event that they do not, the Co-Permittees will assist local groups with conducting and administering annual community clean-up events within their MS4 Area.

Household Hazardous Waste and Recycling Program Promotions

In order to educate community members on the importance of pollution prevention and recycling programs, the Hamilton County Phase II Public Education Steering Committee will frequently advertise and promote the activities and services of the Household Hazardous Waste (HHW) Facility operated by the Hamilton County Solid Waste Management District. Effective advertisement will help minimize illegal dumping activities and improper disposal of household hazardous wastes. The Hamilton County HHW facility distributes a variety of educational brochures related to proper disposal of hazardous wastes and conducts a variety of educational programs for local schools and civic groups. Advertisements and promotions for these services will occur on stormwater websites and brochures to be developed as part of the Co-Permittees' SWQMP. The County HHW Facility currently tracks the amount of waste collected at its facility. All educational activities, programs, and literature conducted and distributed and all waste collected will be documented and included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will advertise Household Hazardous Waste services. In the event that they do not, the Co-Permittees will promote and advertise those services as outlined above.

Soil and Water Conservation District (SWCD) Activities

Agricultural land uses account for approximately 79% of land uses within the Co-As concluded in Part B, to minimize potential impacts Permittees' MS4 Area. associated with agricultural land uses, agricultural producers need to be educated on and encouraged to use stormwater BMPs. The SWCD will encourage local agricultural producers to implement agricultural BMPs including, but not limited to, conservation tillage, nutrient and pesticide management, buffer strips, and wetland restoration. Dayto-day contacts with the agricultural community will be enhanced to include discussions on stormwater BMPs. The SWCD will include articles in their quarterly newsletter, *Town* & Country, on some of the following issues, erosion and sediment control practices, agricultural issues related to stormwater quality as discussed above, opportunities for citizens to get involved with stormwater events such as community clean up events and storm drain marking events, or other relevant stormwater information designed to enhance the urban and rural community's understanding of stormwater issues. In addition, the Hamilton County SWCD will continue to hold its annual erosion and sediment control workshops, which are designed to educate public employees and developers on erosion and sediment control practices. All program activities will be

documented in the Co-Permittees' annual SWQMP report.

Rule 13 Public Participation Lists

The Phase II Public Education Steering Committee will identify those groups and individuals that would be most likely to have an interest in local Stormwater Programs. They will also develop a list of volunteer activities, such as, water quality monitoring, storm drain marking, and community clean-up events that identified groups and individuals would most likely participate in. These lists will be used to document that sufficient opportunities were allotted to involve all constituents interested in participating in Stormwater Programs. Public participation lists, number of contacts made to individuals and groups, and volunteer hours donated will be included with the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will develop Public Participation Lists. In the event that they do not, the Co-Permittees will develop public participation lists specific to their MS4 Area.

Report-A-Polluter Program

The Hamilton County Phase II Public Education Steering Committee will implement a Report-A-Polluter program to field complaints from the public on illegal dumping, illicit discharges, poor erosion control practices, and other activities that negatively impact stormwater quality. Citizens will have the opportunity to submit such complaints through an e-mail hotline. The program will improve public involvement and will serve as an education tool to inform the public about hazards associated with illicit discharges and illegal dumping.

The associated e-mail hotline will be advertised on the Stormwater websites discussed above and through the various stormwater brochures to be developed as part of the Co-Permittees' SWQMP. The Co-Permittees will document the number of complaints received, and document follow up actions taken on all reports. All of this information will be compiled and included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will implement the Report-A-Polluter program. In the event that they do not, the Co-Permittees will organize a Report-A-Polluter program specific to their MS4 Area.

Table 4-1
Public Participation and Involvement BMPs

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Hamilton County Phase II Public Education Steering Committee	Attend and participate in Steering Committee meetings to ensure the effective development and implementation of educational BMPs.	Ongoing	 Document dates of meetings attended. Track attendees at each meeting. Record meeting minutes. Track financial contributions. Track with Programmatic Indicator #1, #2, and #3 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee
Storm Drain Marking	Develop and implement an annual storm drain marking event.	Annually	 Document the date, time, and attendance, at each event. Number and location of all marked inlets and marking method used. Include checkboxes on all sign up sheets allowing attendees to classify themselves as residents, visitors, public service employees, commercial and industrial employees, or construction site employees. Track using Programmatic Indicators #1, #2, # 3, and #4 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Clean-Up Events	Promote and advertise existing community and stream cleanups events through stormwater newsletter articles, brochures, and websites.	Ongoing	 Document the date, time, and attendance, at each event. Include checkboxes on all sign up sheets allowing attendees to classify themselves as residents, visitors, public service employees, commercial and industrial employees, or construction site employees. Track using Programmatic Indicators #1, #2, and #3. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee
HHW and Recycling Promotions	Promote the HHW facilities operated by the Hamilton County Solid Waste Management District.	Ongoing	 Continue to track the amount of material collected at the HHW Facility. Document dates, times, and attendance at all presentations to citizen and school groups that incorporate stormwater quality discussions. Track the number of stormwater brochures distributed on an annual basis. Track using indicator #2, #3, #10, #11, and #12. 	County Surveyor's Office Cicero Parks Department Hamilton County Solid Waste Management District Hamilton County Phase II Public Education Steering Committee

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Soil and Water Conservation District (SWCD) Activities	 Coordinate with the SWCD to: Publish stormwater articles in quarterly newsletters. Provide education and outreach programs targeted towards the agricultural community. Conduct annual erosion and sediment control trainings and workshops. 	Ongoing and annual activities	 Track number of stormwater related articles published. Track the number and type of educational programs and activities conducted targeting the agricultural community. Document dates, times, and attendance at all workshops/trainings focused on stormwater quality related issues. Track using Programmatic Indicator #1, #2, and #3 	County Surveyor's Office Cicero Parks Department Hamilton County SWCD
Rule 13 Public Participation List	 Identify all groups and individuals likely to have an interest in participating in Stormwater Programs. 	Ongoing	 Document interested groups and individuals and submit this list in annual SWQMP reports. Track using Programmatic Indicator #1, #2, and #3. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase II Public Education Steering Committee

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Report-A-Polluter Program	 Implement the Report-A-Polluter program. Include promotional material on the stormwater brochures developed under MCM #1. 	Ongoing	 Document the number of complaints received and all follow up actions taken on reports. Track using Programmatic Indicators #2 and #3. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase Il Public Education Steering Committee

5.0 MINIMUM CONTROL MEASURE #3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Rule 13 requires the development and implementation of a strategy to detect and eliminate illicit discharges to the MS4 conveyance. A storm sewer system map showing the location of all outfalls and MS4 conveyances under the MS4 operator's control and the names and locations of all waters that receive discharges from those outfalls must be developed. Through an ordinance or other regulatory mechanism, illicit discharges must be prohibited from entering the MS4 conveyances and appropriate enforcement procedures and actions are required.

A plan must be developed to detect, address, and eliminate illicit discharges, including illegal dumping into the MS4 conveyance. This plan must locate problem areas via dry weather screening or other means, determine the source, remove or otherwise correct illicit connections, and document actions taken. The plan must also identify all active industrial facilities within the MS4 Area that discharge into the MS4 conveyance.

All public employees, businesses, and the general public must be educated about the hazards associated with illicit discharges and the improper disposal of waste. The educational effort must include informational brochures and guidances for specific audiences and school curricula and the public reporting of illicit discharges and spills. In order to give the public alternatives to improper disposal of wastes, the MS4 entities must initiate or help coordinate existing recycling programs in the MS4 Area for commonly dumped wastes, such as motor oil, antifreeze, and pesticides.

5.1 EXISTING ILLICIT DISCHARGE DETECTION AND ELIMINATION BMPs

Compliance with this MCM requires MS4s to develop and implement a strategy to detect and eliminate illicit discharges to the MS4 conveyance system. To this end, Rule 13 requires communities to develop a storm sewer system map that identifies specified conveyances and outfalls, and requires dry weather screening of those outfalls.

During the first permit term the Co-Permittees made great progress in implementing Illicit Discharged Detection and Elimination BMPs and have submitted Annual Reports to IDEM highlighting key program implementation activities that have occurred. Existing Illicit Discharge Detection and Elimination programs and activities performed by Co-Permittees are discussed below.

Stormwater System Map

Hamilton County has completed mapping outfalls along Long Branch, Bear Slide Creek, and Thorpe Creek, all of unincorporated Clay Township as well as parts of unincorporated Washington Township. The County has mapped 100% of the known County Regulated Drains. In 2007 outfalls were mapped and screened in Clay Township. The County continues to map new County regulated drain conveyances from



'as-built' drawings supplied by the engineers/developers. The Town of Cicero has mapped and screened all of its stormwater conveyances and outfalls.

IDDE Ordinance and Plan

In September 2005, the Count adopted an illicit discharge ordinance. The Town of Cicero has passed a resolution adopting the ordinance as well. Procedures for responding to hazardous spills, the Report-A-Polluter, and conducting outfall mapping and screening are in place.

Report-A-Polluter Program

In 2005 a Report-A-Polluter program was initiated, which provides citizens with an opportunity to notify local government officials of potential water quality concerns. An electronic form and emergency contact numbers are posted on the County Report-A-Polluter website. Six Report-A-Polluter forms were filled out and forwarded to the appropriate MS4 jurisdiction for follow-up during 2007. In addition, the Town of Cicero's website has a "Residents Speak Out" link which provides citizens with an opportunity to speak out on stormwater related issues.

Annual IDDE Good housekeeping and Pollution Prevention Staff Training:

The Co-Permittees have conducted trainings for relevant staff on the hazards associated with illicit discharges and improper disposal of waste and pollution prevention via a Municipal Stormwater Training Video by Excal Corp and through attendance at an Illicit Discharge Detection and Elimination Training session based on the Center for Watershed Protection's Train-the-Trainer Program. The video by Excal Corp includes ways to manage activities to prevent substantial quantities of chemicals and water from entering the conveyance system. Topics also include proper storage and disposal of hazardous wastes, vegetative waste handling, fertilizer and pesticide application, and the function of implemented BMP's. Employees in the Surveyor's Office, Buildings and Grounds Department, Health Department, HHW Facility, Highway Department, Planning Department, and Emergency Management Agency have viewed a Municipal Stormwater Training Video and are keeping track of the training. The County Surveyor's Office plan reviewers and inspectors received over 340 hours of stormwater related training in 2007 alone. Emergency Management Agency staff attended the Hazardous Materials Conference in Greenwood in June, 2007.

5.2 PROPOSED ILLICIT DISCHARGE DETECTION AND ELIMINATION BMPs

The following Stormwater Illicit Discharge Detection and Elimination (IDDE) BMPs will be developed and implemented by the Co-Permittees in order to comply with the minimum requirements of this MCM. Existing BMPs identified in subsection 5.1 with any needed enhancements, as well as, any new BMPs are included in this section. The Copermittees' reduction goal is to remove 25% of known illicit discharges from their conveyance system each year for permit years 2 through 5. However, the political and socioeconomic circumstances often associated with illicit discharges may limit the Copermittees' ability to meet this goal.

Table 5-1 provides a summary of the IDDE BMPs listed below and identifies the measurable goals, timelines, documentation and tracking needs, and responsible parties associated with each BMP. A detailed description of each BMP is provided below.

Stormwater System Map

As required by Rule 13, the Co-Permittees will develop a storm sewer system map that identifies the locations of all outfalls and conveyances under the MS4 operator's control. The Hamilton County Surveyor's Office is currently under contract with Woolpert LLP to map stormwater conveyances and outfalls under the County's control. The Town of Cicero has mapped all of its stormwater conveyances and outfalls. The Co-Permittees will work with their contractors to develop a comprehensive stormwater conveyance map that identifies all stormwater conveyances and outfalls under the Co-Permittees' control. Having an accurate and comprehensive map of the Co-Permittees' MS4 conveyance system will increase the effectiveness and efficiency of responses to illicit discharges entering the storm sewer system. Only conveyance systems with a pipe diameter of twelve inches or larger and open ditches with a 2 foot or larger bottom width will be mapped. All mapping activities will be documented and included in the Co-Permittees' annual SWQMP report.

Illicit Discharge Detection and Elimination Ordinance

As required by Rule 13, the Co-Permittees have developed and will implement and enforce an Illicit Discharge Detection and Elimination (IDDE) ordinance that provides legal authority to keep illicit discharges out of the stormwater conveyance system. The County Surveyor's Office will be responsible for enforcing the requirements of their IDDE ordinance within unincorporated areas of Hamilton County. The Cicero Street and Utilities Department will be responsible for enforcing the requirements of the ordinance within the Town's jurisdiction.

Illicit Discharge Detection and Elimination Plan

The Co-Permittees have developed an IDDE Plan to ensure effective detection and elimination of illicit discharges to the Co-Permittees' separate storm sewer system. The IDDE Plan identifies the methods for detecting, addressing, and eliminating illicit discharges, including illegal dumping, into the MS4 conveyance system. The plan



includes specifics on dry weather screening, methods for determining the source of illicit discharges, removing or correcting illicit connections and documenting actions taken and will be implemented over the second permit term. Only conveyance systems with a pipe diameter of twenty-four inches or larger and open ditches with a 2 foot or larger bottom width will be screened. In addition, the IDDE Plan identifies all active industrial facilities within the MS4 Area that discharge into the Co-Permittees' storm sewer system. The presumptive approach and reduction goal is to remove 25% of cross connections and illicit discharges from the conveyance system each year. Program adjustments will be documented in the Co-Permittees' annual SWQMP report. A listing of known active industrial facilities in Hamilton County, contact information, and standard industrial classification codes are contained in **Appendix 12**.

Report-A-Polluter Program

The Hamilton County Phase II Public Education Steering Committee will implement a Report-A-Polluter program to field complaints from the public on illegal dumping, illicit discharges, poor erosion control practices, and other activities that negatively impact stormwater quality. Citizens will have the opportunity to submit such complaints through an e-mail hotline. The program will improve public involvement and will serve as an education tool to inform the public about hazards associated with illicit discharges and illegal dumping.

The associated e-mail hotline will be advertised on the Stormwater websites discussed above and through the various stormwater brochures to be developed as part of the Co-Permittees' SWQMP. The Co-Permittees will document the number of complaints received, and document follow up actions taken on all reports. All of this information will be compiled and included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will implement the Report-A-Polluter program. In the event that they do not, the Co-Permittees will organize a Report-A-Polluter program specific to their MS4 Area.

Storm Drain Marking

The Hamilton County Public Education Steering Committee will organize and conduct storm drain marking activities. These events will increase citizen awareness of local Stormwater Programs through public participation. The Hamilton County Phase II Public Education Steering Committee will identify locations such as subdivisions, commercial parks, and other areas located in MS4 Areas throughout Hamilton County that warrant storm drain marking and will be tasked with coordinating and advertising these events and programs as well as identifying local volunteers and sponsors interested in participating in the programs. The Co-Permittees will document the number of volunteers that participate in storm drain marking events as well as the number and location of storm drains marked or cast. This information will be included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education

Steering Committee will organize and conduct storm drain activities. In the event that they do not, the Co-Permittees

Household Hazardous Waste and Recycling Program Promotions

In order to educate community members on the importance of pollution prevention and recycling programs, the Hamilton County Phase II Public Education Steering Committee will frequently advertise and promote the activities and services of the Household Hazardous Waste (HHW) Facility operated by the Hamilton County Solid Waste Management District. Effective advertisement will help minimize illegal dumping activities and improper disposal of household hazardous wastes. The Hamilton County HHW facility distributes a variety of educational brochures related to proper disposal of hazardous wastes and conducts a variety of educational programs for local schools and civic groups. Advertisements and promotions for these services will occur on stormwater websites and brochures to be developed as part of the Co-Permittees' SWQMP. The County HHW Facility currently tracks the amount of waste collected at its facility. All educational activities, programs, and literature conducted and distributed and all waste collected will be documented and included in the Co-Permittees' annual SWQMP report.

The Co-Permittees anticipate that the Hamilton County Phase II Public Education Steering Committee will advertise Household Hazardous Waste services. In the event that they do not, the Co-Permittees will promote and advertise those services as outlined above.

Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training

The Co-Permittees will ensure that appropriate staffs are trained on the hazards associated with illicit discharges, improper disposal of waste, and pollution prevention practices. The training will include discussions on ways to manage activities to prevent substantial quantities of chemicals and water from entering the stormwater conveyance system. Training will be conducted annually and will emphasize how substantial quantities of chemicals and water can lead to elevated levels of nutrients and toxins in receiving waters. Additional topics will include proper storage and disposal of hazardous wastes, vegetative waste handling, fertilizer and pesticide application, proper spill response procedures, recycling programs, and the function of Co-Permittee operated and maintained structural stormwater BMPs. The number of trainings, number of staff attending trainings, and information presented will be tracked and reported in the Co-Permittees' annual SWQMP report.

Table 5-1
Illicit Discharge Detection and Elimination BMPs

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Stormwater System Map	Continue mapping of the conveyance system on an annual basis.	Annually	Track using Programmatic Indicators #5 and #6.	County Surveyor's Office Cicero Street and Utilities Department
Illicit Discharge Detection and Elimination (IDDE) Ordinance	 Update and enforce IDDE ordinance. 	Ongoing	 Track using Programmatic Indicators #7, #8, and #9. 	County Surveyor's Office Cicero Streets and Utilities Department
IDDE Plan	 Identify and eliminate illicit storm sewer connections. 	Ongoing	 Track using Programmatic Indicators #7, #8, and #9. 	County Surveyor's Office Cicero Street and Utilities Department
Report-A-Polluter Program	 Implement the Report-A-Polluter program. Include promotional material on the stormwater brochures developed under MCM #2. 	Ongoing	 Document the number of complaints received and all follow up actions taken on reports. Track using Programmatic Indicators #2 and #3. 	County Surveyor's Office Cicero Parks Department Hamilton County Phase Il Public Education Steering Committee

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Storm Drain Marking	Develop and implement an annual storm drain marking event.	Annually	 Document the date, time, and attendance, at each event. Number and location of all marked inlets and marking method used. Include checkboxes on all sign up sheets allowing attendees to classify themselves as residents, visitors, public service employees, commercial and industrial employees, or construction site employees. Track using Programmatic Indicators #1, #2, # 3, and #4 	County Surveyor's Office Cicero Parks Department Hamilton County Phase Il Public Education Steering Committee

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
HHW and Recycling Promotions	Promote the HHW facilities operated by the Hamilton County Solid Waste Management District.	Ongoing	 Continue to track the amount of material collected at the HHW Facility. Document dates, times, and attendance at all presentations to citizen and school groups that incorporate stormwater quality discussions. Track the number of stormwater brochures distributed on an annual basis. Track using indicator #2, #3, #10, #11, and #12. 	County Surveyor's Office Cicero Parks Department Hamilton County Solid Waste Management District Hamilton County Phase II Public Education Steering Committee
Annual IDDE, Good Housekeeping, & Pollution Prevention Staff Training	 Implement an annual IDDE and Good Housekeeping training program. Conduct annual refresher training. 	Annually	 Document number of staff trained, number of training events held, and the curriculum covered in each training session. Track using Programmatic Indicator #2 and #3. 	County Surveyor's Office Highway Department Parks Department Building and Grounds Department Riverview Hospital Cicero Street and Utilities Department Cicero Parks

6.0 MINIMUM CONTROL MEASURE #4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Rule 13 requires the development of an ordinance or other regulatory mechanism and establishment of a construction program that controls polluted runoff from construction activities that disturb 1 or more acres of land in the MS4 Area. This construction program must include a permitting process, erosion control plan review process, site inspections, and enforcement. The permitting process must include a requirement for the construction project site owner to submit a copy of the permit application directly to IDEM. MS4 entities must provide an opportunity to the local SWCD to provide comments and recommendations to the MS4 operator on individual projects.

The construction program must include requirements for the implementation of appropriate BMPs on construction sites to control sediment, erosion, and other waste. MS4 entities must review and approve construction plans submitted by the construction site operator before construction activity commences. Procedures must be developed for site inspection and enforcement to ensure that BMPs are properly installed. These procedures must include a means to identify priority sites for inspection and enforcement, as well as, a means to receive and consider public inquiries, concerns, and information submitted regarding local construction activities. A tracking process must be implemented in which submitted public information is documented and then given to appropriate staff for follow up. MS4 Area personnel responsible for plan review, inspection, and enforcement of construction activities shall receive annual training.

6.1 EXISTING CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPs

Compliance with this MCM requires MS4s to develop, implement, manage, and enforce an erosion and sediment control program for construction activities that disturb 1 or more acres of land within the MS4 Area.

During the first permit term the Co-Permittees made great progress in implementing Construction Site Stormwater Runoff Control BMPs and have submitted Annual Reports to IDEM highlighting key program implementation activities that have occurred. Existing Construction Site Stormwater Runoff Control programs and activities performed by Co-Permittees are discussed below.

Erosion and Sediment Control Ordinance

In 2005 Hamilton County adopted a Construction Site Runoff Control and Post-Construction Site Runoff Control Ordinance. The County has also developed a Stormwater Technical Standards Manual. In December 2005 a public meeting was held in Hamilton County to explain these ordinances and standards to the development, engineering, and construction industry. The Town of Cicero has passed a resolution adopting the County's Construction and Post-Construction Site Runoff Control Ordinance and the Stormwater Technical Standards Manual.



Plan Review, Site Inspection, and Enforcement/Tracking Database

On January 1, 2006 the Hamilton County Surveyor's Office assumed Rule 5 plan review and enforcement for unincorporated areas of Hamilton County. In 2007, the Hamilton County Surveyor's Office reviewed over 51 plans for erosion control and made over 413 site visits. Hamilton County and the Town of Cicero submit construction activity reports to the Rule 13 Coordinator on a monthly basis.

Staff Training

The Co-Permittees committed to ensuring that staff members receive adequate stormwater training. In 2007 plan reviewers and inspectors in the Surveyor's Office received a total of more than 340 hours of stormwater related training discussing erosion control and plan review inspections. Plan reviewers and inspectors for the Town of Cicero also participate in annual training programs.

Procedure for Prioritizing Construction Activities

Prioritization for construction activities is based upon the size of the site as well as the presence of sensitive areas such soils, wetlands, threatened or endangered species habitat, outstanding waters, impaired waters, recreational waters, and surface drinking water sources.

QAQC of Program

The Hamilton County Stormwater Standards Steering Committee, which includes representatives from the City of Carmel, the Town of Cicero, the Town of Fishers, the City of Noblesville, the City of Westfield, and Hamilton County meets on a monthly basis to discuss Stormwater Program implementation throughout Hamilton County MS4s.

6.2 PROPOSED CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPs

The following Construction Site Stormwater Runoff Control BMPs will be developed and implemented by the Co-Permittees in order to comply with the minimum requirements of this MCM. Existing BMPs identified in subsection 6.1 with any needed enhancements, as well as, any new BMPs are included in this section. The program is designed to minimize the amount of sediment and other pollutants from being discharged from construction sites. The presumptive approach of implementing this program assumes that these pollutants will be reduced each year.

Table 6-1 provides a summary of the Construction Site BMPs to be implemented and identifies the measurable goals, timeline, documentation and tracking needs, and responsible parties associated with each BMP. A detailed description of each BMP is provided below.

Erosion and Sediment Control Ordinance

To minimize water quality impacts of development occurring within the Co-Permittees' MS4 Area and to ensure that new and redevelopment is managed as efficiently as possible, the Co-Permittees have developed a Construction Site Runoff Control and



Post-Construction Site Runoff Control Ordinance fulfilling the requirements of 327 IAC 15-5 (Rule 5). These ordinances address both construction site runoff and post-construction site runoff. The Co-Permittees will review their ordinances annually to ensure they meet the minimum requirements of Rule 5.

Plan Review, Site Inspection, and Enforcement

Plan reviews for projects occurring within unincorporated portions of Hamilton County will be reviewed for compliance by staff from either the Hamilton County Plan Commission or the Hamilton County Surveyor's Office or their designee. Plan reviews conducted by the Town of Cicero will be conducted by the Town Planner or their designee. These departments will also be responsible for conducting site inspections to ensure that practices listed in the construction plan are being installed properly in the field and are in compliance with local ordinances. Copies of submitted plans will be made available to the Hamilton County SWCD upon request. The Co-Permittees intend to review 100% of construction plans and inspect 100% of construction sites with land disturbances greater than or equal to 1 acre occurring within their MS4 Area. Construction site operator compliance will be documented by tracking the number of requests made for construction plan revisions, corrections made in response to inspection reports, and enforcement action required corrections. All such activities will be documented in the Co-Permittees' annual SWQMP report.

Staff Training

The Co-Permittees will ensure that an adequate amount of skilled staff is in place to account for increased workloads associated with performing erosion and sediment control plan review, inspection, and enforcement as mandated by Rule 13. All Co-Permittee staff involved in plan review and site inspection activities will receive IDEM or equivalent training. The training program content will include at minimum information on construction and post-construction BMPs. All training activities including the specific curriculum, as well as the number of staff trained, will be included in the Co-Permittees' annual SWQMP report.

Erosion and Sediment Control and Post-Construction BMP Tracking Database

The Co-Permittees will develop and implement a database to track the status of construction projects, erosion and sediment control activities, and post-construction BMPs. The database will ensure efficient management and accurate reporting on the status of development within the Co-Permittees' MS4 Area. The database will be utilized to track and document erosion and sediment control violations, community complaints, and public informational requests. The database will serve as an aid to inspection staff for follow-up inspections and, if necessary, enforcement actions. The Co-Permittees will submit updates made to the database to the IDEM monthly. All activities associated with the database will be summarized and included in the Co-Permittees' annual SWQMP report.

Procedure for Prioritizing Construction Activities

The Co-Permittees will implement their written procedure for prioritizing construction activities for the plan review, inspection, and enforcement. This process will ensure that construction and development site inspections are as effective as possible. Sites greater than or equal to 10 acres in size and sites containing slopes greater than or equal to 4%, wetlands, or endangered, threatened, or rare species will likely be prioritized for more frequent inspections. A copy of the written procedure will be submitted to the IDEM in the Co-Permittees' annual SWQMP report.

Inspection and Enforcement Documentation

The Co-Permittees will adopt the IDEMs standard Inspection and Enforcement Form for Erosion and Sediment Control inspectors to complete following each site inspection. The form will ensure that Co-Permittee inspection procedures are consistent with State's Rule 5 program. To improve program compliance, all developers will be given a copy of the form following each inspection and required to sign suggesting their understanding and willingness to address any BMP inadequacies identified. If follow-up inspections prove that the identified BMP inadequacies were not addressed, the form will outline enforcement measures to be taken by the Co-Permittees. Annual reports will include a copy of each form completed during each site inspection.

Training for Construction Professionals

The Co-Permittees will advertise and promote education and training opportunities for local construction and development professionals. IDEM, the Hamilton County SWCD and various other organizations around the state are planning to hold a variety of training modules on erosion and sediment control and post-construction policies and technologies. Appropriately trained professionals will improve the effectiveness of construction and post-construction planning, which will hopefully minimize the water quality impacts associates with new and redevelopment. The Co-Permittees will document all training programs promoted and will work with sponsoring agencies to track the participation and attendance of local construction and development professionals in such events. All relevant information will be included in the Co-Permittees' annual SWQMP report.

Quality Assurance/Quality Control (QA/QC) of overall program

In order to ensure consistency with the State's Rule 5 program and maintain overall program quality, the Co-Permittees will comply with Rule 5 on Co-Permittee-owned and operated projects. The Co-Permittees will work with IDEM to seek approval for the QA/QC program and to review projects owned and operated by the Co-Permittees. The Co-Permittees will continue to review the QA/QC program with agencies on an annual basis and will forward any changes to IDEM in their annual SWQMP report. The Co-Permittees will track the number of projects subject to Rule 5, the number of IDEM meetings, and information discussed during the meetings. This action will allow the Co-Permittees to correct any program deficiencies or make updates based on new information or technology.

Table 6-1
Construction Site Stormwater Runoff Control BMPs

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Erosion and Sediment Control Ordinance	 Update and implement the Construction Site Runoff Control Ordinance. 	Annually	 Document the number of construction sites occurring within the Co-Permittees' MS4 Area. 	County Surveyor's Office Hamilton County Plan Commission Cicero Planning
Plan Review, Site Inspection, and Enforcement	 Review 100% of construction plans and inspect 100% of construction sites disturbing greater than or equal to 1 acre of land. 	Ongoing	 Document the number of plans reviewed, the number of site inspections made and the number of enforcement actions taken. 	County Surveyor's Office Hamilton County Plan Commission Cicero Planning
Staff Training	Co-Permittee staff will attend annual trainings.	Annually	 Document the date of the training, the issues covered at the training, and the number of staff members participating in the trainings. Track using Programmatic Indicators #2 and #3. 	County Surveyor's Office Hamilton County Plan Commission Cicero Planning

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Erosion and Sediment Control and Post- Construction BMP	 Track the status of construction projects, erosion and sediment control activities, and post- construction BMPs. 	Ongoing	 Document the number of plans reviewed, the number of site inspections made and the number of enforcement actions taken, the location of structural BMPs installed, inspected, and maintained or improved. 	County Surveyor's Office Hamilton County Plan Commission
Tracking Database			Submit monthly reports to IDEM.	
			 Track using Programmatic Indicators #13, #14, #15, #16, #17, #18, and #19, #20, #21. 	
Procedure for Prioritizing	 Implement procedure for prioritizing construction sites for 	Ongoing	Submit procedure to the IDEM in annual SWQMP report.	County Surveyor's Office
Construction Activities	plan review and inspection.		 Track using Programmatic Indicator #15. 	Hamilton County Plan Commission
				Cicero Planning
Inspection and	 Utilize standard inspection forms to ensure effective 	Ongoing	 Save a copy of all plan review and site inspection forms for submittal with the Co- 	County Surveyor's Office
Enforcement Documentation	management of active construction projects.		Permittees' annual SWQMP report.	Hamilton County Plan Commission
				Cicero Planning
Training for Construction	 Promote and advertise training programs conducted 	Ongoing	 Document the date of the trainings, the issues covered at the trainings, and the number 	County Surveyor's Office
Professionals	by IDEM and other organizations.		participants attending the trainings.	Hamilton County Plan Commission

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
QA/QC of Overall Program	 Comply with Rule 5 on Co-Permittee owned and operated projects. Review program with agencies at least annually. 	Annually	 Document dates, times and attendance at each meeting. Document the number of Co-Permittee managed projects subject to Rule 5. 	County Surveyor's Office Hamilton County Plan Commission Cicero Planning

7.0 MINIMUM CONTROL MEASURE #5 POST-CONSTRUCTION STORMWATER RUNOFF CONTROL

Rule 13 requires the development of an ordinance or other regulatory mechanism and establishment of a post-construction program that addresses runoff from new development and redevelopment areas that disturb 1 or more acres of land in the MS4 Area. This program must include a permitting process, plan review process, site inspections, and enforcement. MS4 Area personnel responsible for plan review, inspection, and enforcement of Post-Construction BMPs shall receive annual training.

Where appropriate, MS4 entities must use a combination of storage, infiltration, filtering, or vegetative practices to reduce the impact of pollutants in stormwater runoff on receiving waters in areas that are the responsibility of the MS4 entity. A written Operational and Maintenance (O&M) Plan must be developed and implemented for all existing stormwater structural BMPs, which are under the control of the MS4 entity. As new Post-Construction BMPs are added to areas under the control of the MS4 entity, the O&M Plan must be updated accordingly.

7.1 EXISTING POST-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPs

Compliance with this MCM requires MS4s to develop a program for managing post-construction Best Management Practices (BMPs) that will ensure adequate, long-term stormwater quality benefits in new development and redevelopment activities. Once construction is complete, post-construction practices specified by the MS4 must be implemented to ensure adequate stormwater quality is maintained from the developed site via an enforceable ordinance or other regulatory mechanism.

During the first permit term the Co-Permittees made great progress in implementing Post-Construction Site Stormwater Runoff Control BMPs and have submitted Annual Reports to IDEM highlighting key program implementation activities that have occurred. Existing Post-Construction Site Stormwater Runoff Control programs and activities performed by Co-Permittees are discussed below.

Post-Construction Ordinance

In 2005, Hamilton County adopted a Construction Site Runoff Control and Post-Construction Site Runoff Control Ordinance. Since January 2007 the County has been implementing a Stormwater Technical Standards Manual. This manual includes requirements and standards for Post-Construction water quality BMP's. The Town of Cicero has passed a resolution adopting the County's Construction and Post-Construction Site Runoff Control Ordinance and the Stormwater Technical Standards Manual.



Plan Review, Site Inspection, and Enforcement:

On January 1, 2006 the Hamilton County Surveyor's Office assumed Rule 5 plan review and enforcement for unincorporated areas of Hamilton County. Projects within the jurisdiction of the Town of Cicero are reviewed and inspected by representatives of the Town or the Hamilton County Surveyor's Office. All construction activities and enforcement actions are documented and tracked, and construction activity reports are sent to the Rule 13 Coordinator on a monthly basis.

Training for Construction Professionals

The Co-Permittees are committed to ensuring that staff members receive adequate stormwater training. In 2007 plan reviewers and inspectors in the Surveyor's Office received a total of more than 340 hours of stormwater related training discussing erosion control and plan review inspections. Plan reviewers and inspectors for the Town of Cicero also participate in annual training programs.

Inspection and Enforcement Documentation/Tracking Database:

The Hamilton County Surveyor's Office tracks construction activity and enforcement actions. The Surveyor's Office conducts plan reviews of new construction, including plat reviews, detention requirements, construction plans, engineer estimates, and permit applications. Hamilton County and the Town of Cicero submit construction activity reports to the Rule 13 Coordinator on a monthly basis.

Post-Construction BMP Operation and Maintenance Plan/Tracking Database:

Operation and Maintenance Plans for BMP's are outlined in the Stormwater Technical Standards Manual. The County GIS system is being used to map Post-Construction BMP's from as built drawings and on-site inspections for County regulated BMP's. Private BMP's are not mapped or maintained by the County.

7.2 PROPOSED POST-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPs

The following Post-Construction Site Stormwater Runoff Control BMPs will be developed and implemented by the Co-Permittees in order to comply with the minimum requirements of this MCM. Existing BMPs identified in subsection 7.1 with any needed enhancements, as well as, any new BMPs are included in this section. The Co-Permittees' program is designed to ensure adequate stormwater quality is maintained from developed sites. The presumptive approach of implementing this program assumes that overall stormwater quality will improve each year. The Hamilton County Stormwater Technical Standards Manual contains specific reduction goal percentages for each BMP.

Table 7-1 provides a summary of the Post-Construction Site Runoff BMPs to be implemented and identifies the measurable goals, timelines, documentation and tracking needs and responsible parties associated with each BMP. A Detailed description of each BMP is provided below.

Post-Construction Control Ordinance

The comprehensive runoff ordinances discussed in Section 6.2 includes Post Construction provisions that meet the minimum requirements of 327 IAC 15-13 (Rule 13). The Post-Construction provisions will minimize the water quality impacts from new/redevelopment occurring within the Co-Permittees' MS4 Area and ensure that new and redevelopment within the MS4 Area is managed as efficiently as possible. The Co-Permittees have developed the Hamilton County Stormwater Technical Standards Manual, which acts as the Co-Permittees' official technical standards document.

The Co-Permittees have adopted a policy that controls stormwater runoff quality on Total Suspended Solids (TSS). This requirement is being adopted as the basis of their stormwater quality management program for all areas of jurisdiction.

The Hamilton County Stormwater Technical Standards Manual currently identifies twelve preapproved BMP methods to be used alone or in combination to achieve the stormwater quality goals for a given project. BMP measures include the measures listed below.

- Bioretention
- Constructed Wetlands
- Underground Detention
- Extended Dry Detention
- Infiltration Basin
- Infiltration Trench

- Media Filtration Underground Sand
- Media Filtration Surface Sand
- Storm Drain Insert
- Filter Strip
- Vegetated Swale
- Wet Pond

Note that a single BMP measure may not be adequate to achieve the water quality goals for a project. It is for this reason that a "treatment train," a number of BMPs in a series, is often required for a project.

Details regarding the pollutant removal rates and the applicability and design of these pre-approved BMPs are contained within the Hamilton County Stormwater Technical Standards Manual. The information provided establishes performance criteria for stormwater quality management and procedures to be followed when preparing a BMP plan for compliance. Post-construction BMPs must be sized to treat the water quality volume, WQv, for detention-based BMPs or the water quality discharge, Qwq, for flow-through BMPs. The Hamilton County Stormwater Technical Standards Manual provides the methodology for calculating the water quality volume and water quality discharge values.

According to the Hamilton County Stormwater Technical Standards Manual, BMPs not previously accepted by the Co-Permittees must be certified by a professional engineer licensed in State of Indiana and accepted through Hamilton County or the Town of Cicero. American Society of Testing and Materials (ASTM) standard methods must be

followed when verifying performance of new measures. New BMPs, individually or in combination, must meet the 80% TSS removal rate at 50-125 micron range (silt/fine sand) without re-entrainment and must have a low to medium maintenance requirement to be considered by the Co-Permittees. Testing to establish the TSS removal rate must be conducted by an independent testing facility, not the BMP manufacturer.

Plan Review, Site Inspection, and Enforcement

The Co-Permittees will conduct post-construction BMP plan reviews in conjunction with Erosion and Sediment Control plan reviews, post-construction BMP inspections in conjunction with construction site inspections, and if necessary will refer sites for enforcement actions. Plans will be reviewed to ensure that BMPs are being installed properly and are in compliance with the technological standards required as part of the Co-Permittees' ordinances containing specific reduction goal percentages for each BMP. Construction site operator compliance improvement will be documented via requested plan revisions made, corrections made in response to inspection reports and forms requests, and enforcement action required corrections. Enforcement actions include requiring corrective actions, fines, and/or stop work orders.

Staff Training

The Co-Permittees will ensure that an adequate amount of skilled staff is in place to account for increased workloads associated with performing erosion and sediment control and post-construction plan review, inspection, and enforcement as mandated by Rule 13. All Co-Permittee staff involved in plan review and site inspection activities will receive IDEM or equivalent training. The training program content will include at minimum information on construction and post-construction BMPs. All training activities including the specific curriculum, as well as the number of staff trained, will be included in the Co-Permittees' annual SWQMP report.

Inspection and Enforcement Documentation

The Co-Permittees will develop an inspection and enforcement form for Post-construction BMP inspectors to complete following each site inspection. The form will require inspectors to document Post-Construction BMP adequacies and inadequacies identified during each visit. All construction site managers will be given a copy of the form following each inspection and be required to sign suggesting their understanding and willingness to address any BMP inadequacies identified. If follow-up inspections prove that the identified BMP inadequacies were not addressed, the form will identify enforcement measures to be taken by the Co-Permittees.

Post-Construction BMP Operation and Maintenance Plan

The Co-Permittees will develop and implement an Operation and Maintenance (O&M) Plan for Co-Permittee owned and operated Post-Construction BMPs to ensure long-term effectiveness and adequacy of newly installed BMPs. Maintenance activities will be documented and included in the Co-Permittees' annual SWQMP report.

Erosion and Sediment Control and Post-Construction BMP Tracking Database

The Co-Permittees will develop and implement a database to track the status of construction projects, erosion and sediment control activities, and post-construction BMPs. The database will ensure efficient management and accurate reporting on the status of development within the Co-Permittees' MS4 Area. The database will be utilized to track and document erosion and sediment control violations, community complaints, and public informational requests. The database will serve as an aid to inspection staff for follow-up inspections and, if necessary, enforcement actions. The Co-Permittees will submit updates made to the database to the IDEM monthly. All activities associated with the database will be summarized and included in the Co-Permittees' annual SWQMP report.

Training for Construction Professionals

The Co-Permittees will advertise and promote education and training opportunities for local construction and development professionals. IDEM, the Hamilton County SWCD and various other organizations around the state are planning to hold a variety of training modules on erosion and sediment control and post-construction policies and technologies. Appropriately trained professionals will improve the effectiveness of construction and post-construction planning, which will hopefully minimize the water quality impacts associates with new and redevelopment. The Co-Permittees will document all training programs promoted and will work with sponsoring agencies to track the participation and attendance of local construction and development professionals in such events. All relevant information will be included in the Co-Permittees' annual SWQMP report.

Table 7-1
Post-Construction Site Stormwater Runoff Control BMPs

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Post-Construction Control Ordinance	 Update and implement the Post- Construction Site Runoff Control Ordinance. 	Annually	Document the number of construction sites occurring within the Co-Permittees' MS4 Area.	County Surveyor's Office Hamilton County Plan Commission Cicero Planning
Plan Review, Site Inspection, and Enforcement	 Review 100% of construction plans and inspect 100% of construction sites disturbing greater than or equal to 1 acre of land. 	Ongoing	 Document the number of plans reviewed, the number of site inspections made and the number of enforcement actions taken. 	County Surveyor's Office Hamilton County Plan Commission Cicero Planning
Staff Training	Co-Permittee staff will attend annual trainings.	Annually	Document the date of the training, the issues covered at the training, and the number of staff members participating in the trainings.	County Surveyor's Office Hamilton County Plan Commission Cicero Planning
Inspection and Enforcement Documentation	 Utilize standard inspection forms to ensure effective management of construction projects. 	Ongoing	 Save a copy of all plan review and site inspection forms for submittal with the Co- Permittees' SWQMP report. 	County Surveyor's Office Hamilton County Plan Commission

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Post-Construction BMP Operation and Maintenance Plan	Develop and implement Post-Construction BMP O&M Plan.	Ongoing	 Document all maintenance activities conducted on an annual basis. Track using Programmatic Indicator #19 	County Surveyor's Office County Highway Department Cicero Street and Utilities Department
Erosion and Sediment Control and Post- Construction BMP Tracking Database	Track the status of construction projects, erosion and sediment control activities, and post-construction BMPs.	Ongoing	 Document the number of plans reviewed, the number of site inspections made and the number of enforcement actions taken, the location of structural BMPs installed, inspected, and maintained or improved. Submit monthly reports to IDEM. Track using Programmatic Indicators #13, #14, #15, #16, #17, #18, and #19, #20, #21. 	County Surveyor's Office Hamilton County Plan Commission Cicero Planning
Training for Construction Professionals	 Promote and advertise training programs and modules conducted by IDEM and other organizations. 	Ongoing	Document the date of the trainings, the issues covered at the trainings, and the number participants attending the trainings.	Surveyor's Office Hamilton County Plan Commission Cicero Planning

8.0 MINIMUM CONTROL MEASURE #6 POLLUTION PREVENTION AND GOOD HOUSEKEEPING

Rule 13 requires the development and implementation of a program to prevent or reduce polluted runoff from municipal operations within the MS4 Area. The program must include written documentation of maintenance activities, maintenance schedules, and long term inspection procedures for BMPs to reduce floatables and other pollutants discharged from the separate storm sewers.

Controls must be implemented for reducing or eliminating the discharge of pollutants from operational areas, including roads, parking lots, maintenance and storage yards, and waste transfer stations. Written procedures must be developed and implemented for the proper disposal of waste or materials removed from separate storm sewer systems and operational areas. New flood management projects must be assessed via written documentation for their impacts on water quality and existing flood management projects must be examined for incorporation of additional water quality protection devices or practices. MS4 entity employees must be properly trained on various topics, such as, fertilizer and pesticide application, and the function of BMPs. Such training must be documented in writing.

8.1 EXISTING POLLUTION PREVENTION AND GOOD HOUSEKEEPING BMPs

Compliance with this MCM requires MS4s to develop and implement a program to prevent or reduce pollutant runoff from municipal operations within the MS4 Area.

During the first permit term the Co-Permittees made great progress in implementing Pollution Prevention and Good Housekeeping Control BMPs and have submitted Annual Reports to IDEM highlighting key program implementation activities that have occurred. Existing Pollution Prevention and Good Housekeeping programs and activities performed by Co-Permittees are discussed below.

MS4 Conveyance System Maintenance Plan and Documentation:

The Hamilton County Buildings and Grounds Department requires clean up of litter, waste, and manure in rental agreements for 4-H buildings and grounds. Interior drains at most County facilities are connected to the sanitary sewer, rather than storm sewers. All County vehicle maintenance with the exception of those vehicles owned and operated by the County Highway Department is done off-site at privately owned facilities.

The County Highway Department vehicle maintenance facility is using secondary containment devices, such as spill trays, to prevent leaks or spills from stored barrels of oil and other petroleum products. The County Highway Department currently maintains all drainage areas that are not regulated drains that are associated with a County Road or the County's right-of-way. The County Highway Department responds to internal and external requests and/or complaints to clean up trash and accumulated litter.



The County Parks and Recreation Department educates maintenance staff on proper handling and storage of all chemicals and equipment fuels. Chemical spill kits are stored at each necessary facility and secondary containment devices are utilize under all refueling tanks at Cool Creek Park, Morse Park, Coxhall Gardens, and White River Campground. Secondary containment devices are also utilized under chemical tanks at North Pool. The Parks and Recreation Department also regularly acquires floodplain property for parkland and restricts mowing along stream banks. In addition, the Hamilton County Airport Authority has completed a SWPP for the Indianapolis Executive Airport, which is located in Boone County.

In the Town of Cicero, vehicle maintenance facilities at Fire Department and Street and Utilities Department are connected to the sanitary sewer system. This ensures that accidental chemical spills outside of secondary containment devices do not end up in storm sewers. The Street and Utilities and the Parks Departments are using secondary containment devices for storage of some chemicals and petroleum products to prevent leaks or spills from entering the storm sewer system. These devices are believed to be functioning properly.

Secondary Containment:

Numerous facilities owned by the Co-Permittees have spill containment areas. The Highway Department has a 500 gallon off-road diesel tank with secondary containment. The County Highway Department vehicle maintenance facility is connected to the sanitary sewer system. Riverview Hospital's above ground and underground storage tanks are double walled and monitored for leak protection. Riverview stores small quantities of fuel for the visitor transport cart and equipment in cabinets designed for flammable containment and storage. Spill kits are easily accessible in areas throughout the hospital in which hazardous materials are handled and/or stored. Chemicals for boilers are stored in double walled storage tanks within the hospital. The Cicero Streets and Utilities Department facility is connected to the sanitary sewer system and is implementing secondary containment devices for storage of chemicals.

Sand and Salt Storage:

The County Highway Department's road salt is stored in a covered facility with drains that lead to brine tanks, which are pumped out on an as needed basis. The Highway Department has developed a policy that reduces the amount of sand applied to roads during winter weather events. Other departments using salt also store salt in covered areas. Cicero's salt and sand storage areas are also under cover.

Chemical Spill Response Plan:

Riverview Hospital provides a hazardous materials training program for all new staff employees. Each staff member is trained in handling, storage, and disposal of such wastes. The hospital also requires employees to go through a refresher program and to pass a hazardous material exam on an annual basis. Spill kits are easily accessible in areas throughout the hospital in which hazardous materials are handled and/or stored. The Safety & Risk Management Department visits the HHW facility and other



department facilities on a biannual basis or by request, to ensure that they are implementing proper spill containment and prevention techniques, such as the protection of storm drain outlets. The Safety & Risk Management Department manages the Hazardous Communication & Emergency Action Program in which County employees are trained for compliance with OSHA safety standards. The Safety & Risk Management Department responds to spills from County equipment by acting as liaison between County and private companies that perform the clean-up work. In the Town of Cicero, the Fire Department responds to accidents and incidents involving the spillage of hazardous materials and chemicals and ensures that the all chemicals are properly contained.

8.2 PROPOSED POLLUTION PREVENTION AND GOOD HOUSEKEEPING BMPs

The following Pollution Prevention and Good Housekeeping BMPs will be developed and implemented by the Co-Permittees in order to comply with the minimum requirements of this MCM. Existing BMPs identified in subsection 8.1 with any needed enhancements, as well as, any new BMPs are included in this section. The Co-Permittees have initiated the implementation of a Pollution Prevention and Good Housekeeping Program as part of this Part C Plan, which outlines the overall strategy for gradually implementing the program and its corresponding BMPs. The program is designed to address the quality of stormwater discharges from Co-Permittee activities to their MS4 conveyance system. The presumptive approach of implementing this program assumes that overall stormwater quality will improve each year by reducing the amounts of pollutants entering the conveyance system. Reduction goal percentages will be correlated to amounts of BMPs installed, amounts of material collected from BMPs, and plans implemented. For example, when a certain amount of street sweeping material is collected, it is assumed that the unknown total amount of material entering the conveyance system is reduced by the amount collected.

Table 8-2 provides a summary of the Pollution Prevention and Good Housekeeping BMPs to be implemented and identifies the measurable goals, documentation and tracking needs, timelines, and responsible parties associated with each BMP. A detailed description of each BMP is provided below.

MS4 Conveyance System Maintenance Plan and Documentation

Hamilton County currently documents all maintenance conducted on County Regulated Drains. The Co-Permittees will track MS4 Conveyance System Maintenance activities in a maintenance database. The database will track activities associated with Pollution Prevention and Good Housekeeping BMPs. Maintenance schedules will be kept at maintenance areas and updated annually. Scheduling and tracking of activities will increase overall program effectiveness. The database will track all good housekeeping measures performed by the Co-Permittees including, street sweeping, periodic litter pickups, periodic BMP and catch basin cleaning, storm sewer inspections conducted, roadside shoulder and ditch stabilization, storm sewer maintenance and remediation performed, pesticides/fertilizers applied, secondary containment devices installed, and salt and sand storage areas that have been enhanced. All activities performed will be documented in Co-Permittees' annual SWQMP reports.

Table 8-1
Storm Sewer System Maintenance Schedules

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A. Periodic Litter Pickup	Co-Permittee staff will annually conduct litter pickup events along major thoroughfares, at stormwater outfalls, and other areas to be prioritized during the permit term.
B. Periodic BMP Structure Cleaning	MS4 owned and operated structural stormwater BMPs will be maintained as specified in their corresponding O&M manuals.
C. Periodic Pavement Sweeping	At a minimum, main thoroughfares with curbs and gutters and bridge decks will be swept once per year.
D. Roadside Shoulder and Ditch Stabilization	Roadside shoulder and ditches will be inspected annually. Repairs will be prioritized and all work conducted will be documented.
E. Planting and Proper Care of Roadside Vegetation	Roadside inspections will include vegetative inspections.
F. Remediation of Outfall Scouring	All stormwater outfalls will be evaluated for scouring and erosion in the permit term. Decisions for remedial actions will be made at the time of problem identification.

Secondary Containment

The Co-Permittees will implement secondary containment measures within all facilities that store hazardous chemicals. Within Hamilton County, these facilities include, but are not limited to, Highway Department Maintenance Facilities, Parks and Recreation Department Maintenance Facilities, the 4-H Fairground Maintenance Facilities, and the Household Hazardous Waste Facility. Within the Town of Cicero, these facilities include,

but are not limited to, the Street and Utilities Department Maintenance Facility and Parks Department Maintenance Facilities. Implementation of secondary containment devices will reduce the potential impact of accidental spills of concentrated solutions, acids, alkalies, salts, oils, or other polluting materials that could contaminate stormwater runoff. In the event that other Co-Permittee owned and operated facilities begin storing hazardous chemicals in the future, secondary containment measures will be implemented at those facilities. The types of secondary containment devices implemented, the location of such BMPs, and any information specific to these devices will be included in the Co-Permittees' annual SWQMP report.

Oil and Water Separator Maintenance Plan

Vehicle maintenance areas can be significant sources of stormwater pollutants. To minimize the impacts that vehicle maintenance areas have on stormwater runoff many Co-Permittee facilities where vehicle maintenance is conducted have installed oil and water separators and oil and grit separators. In order to ensure long-term operation of these BMPs, staff will conduct maintenance on the BMPs as specified by their manufacturer's guidelines. Relevant staff will receive training on the function and importance of the BMPs, how to maintain them, and how to properly dispose of all waste collected. The Co-Permittees will report all annual maintenance activities performed in their annual SWQMP report.

Salt and Sand Storage

Currently all salt stockpiles maintained by the Co-Permittees are stored in covered facilities, which minimize the ability of these stockpiles to impact stormwater runoff quality. The Co-Permittees will document the amount of salt that is applied to roadways on an annual basis. Also, relevant staff will be instructed to contain salt spilled during mixing and loading in order to maintain cleanliness and minimize the risks to stormwater runoff.

Any uncovered sand storage areas will be inspected on a monthly basis and after rain events in order to ensure that runoff from these areas is not leaving the site. Maintenance will be performed on these areas when inspections identify potential problems. Potential maintenance activities to be performed at these sites may include, but are not limited to the following procedures, parking lot sweeping, installation and maintenance of silt fence, or installation sediment removing catch basins.

In addition, once snow and/or ice has melted, Co-Permittee personnel will sweep, as necessary, those areas of the maintenance facilities that have accumulated salt, sand, and other debris as a result of day-to-day operations. The amount of salt applied and the frequency of sweeping will be documented in the Co-Permittees' annual SWQMP report.

Chemical Spill Response

The Co-Permittees will post spill response plans at all facilities where refueling activities occur or hazardous materials, fuels, and other chemicals are used, mixed, and/or stored. The posting of these plans will ensure efficient and effective responses to



accidental chemical spills, thereby reducing the potential for spills to come into contact with stormwater runoff. Relative Co-Permittee maintenance staff members will be required, to receive annual training on proper spill response techniques. All facilities in which hazardous materials are stored will be evaluated annually for safety. In the event a facility is determined to pose a risk to stormwater quality runoff, the Co-Permittees will take the proper steps to ensure that the hazardous materials are stored properly, that secondary containment measures are in place, and that spill clean-up and containment equipment such as drain covers and absorbent are available. The Co-Permittees will document all activities associated with chemical spill response training and inspections. This information will be included in the Co-Permittees' annual SWQMP report.

Wash Water Management

All wash waters and wastewaters are currently prohibited from entering waters of the state without a valid NPDES Wastewater Permit. The Co-Permittees will implement procedures and/or policies to prevent vehicle wash waters from gaining direct access to nearby receiving waters or stormwater conveyance systems. The Co-Permittees will require all Co-Permittee owned vehicles to be washed within facilities that are connected to the sanitary sewer, at commercial car wash facilities, on impervious areas without direct access to the stormwater conveyance system, or by routing vehicle wash waters through other appropriate BMPs. The Co-Permittees will report on progress made to minimize the impact of vehicle wash waters on stormwater runoff quality in their annual SWQMP reports.

Waste Disposal

Removal of accumulated materials (wastes) is part of routine maintenance of any stormwater conveyance system. Wastes are also generated as part of the day to day activities occurring at various municipal maintenance facilities and areas. The Co-Permittees will ensure that all wastes collected are disposed of in a manner that prevents them from contaminating stormwater runoff. Such wastes include, but are not limited to, dredge spoil, accumulated sediments, floatables, and debris. Co-Permittee staff will determine if the waste generated can be reused, recycled, or requires disposal in a sanitary landfill. The Co-Permittees will contract with a private firm for those wastes that require disposal in a landfill. The Co-Permittees will document all activities associated with waste disposal, including the types of waste generated, the amount of waste generated, and the method by which the waste was disposed. This information will be included in the Co-Permittees' annual SWQMP report.

Street Sweeping Program

Regular street sweeping reduces the amount of sediment and other various pollutants that have access to local receiving waters. The Co-Permittees will sweep all roads within their MS4 Area on an annual basis and will track the total number of curb miles swept or will document the weight of material collected as a result of street sweeping activities. The waste collected is considered a solid waste and will be disposed of at local landfills. All information related to the Co-Permittees' street sweeping program will be submitted in the Co-Permittees' annual SWQMP report.

Snow Disposal Areas

Any snow that is cleared and pushed into large piles from Co-Permittee roads and operational areas, will be located away from stormwater inlets and conveyances to ensure that there is minimal potential for pollutant runoff impact on MS4 Area receiving waters.

Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training

The Co-Permittees will ensure that appropriate staffs are trained on the hazards associated with illicit discharges, improper disposal of waste, and pollution prevention practices. The training will include discussions on ways to manage activities to prevent substantial quantities of chemicals and water from entering the stormwater conveyance system. Training will be conducted annually and will emphasize how substantial quantities of chemicals and water can lead to elevated levels of nutrients and toxins in receiving waters. Additional topics will include proper storage and disposal of hazardous wastes, vegetative waste handling, fertilizer and pesticide application, proper spill response procedures, recycling programs, and the function of Co-Permittee operated and maintained structural stormwater BMPs. The number of trainings, number of staff attending trainings, and information presented will be tracked and reported in the Co-Permittees' annual SWQMP report.

Fertilizer and Pesticide Management

Currently a variety of Co-Permittee Departments and representatives utilize fertilizers and pesticides in their day to day operations. Within Hamilton County, the Parks and Recreation Department, Buildings and Grounds Department, Highway Department or their contracted landscaping firms utilize fertilizers and/or pesticides. Within the Town of Cicero, the Parks Department and Street and Utilities Department utilize fertilizers and/or pesticides. In order to minimize the impacts that these chemicals have on stormwater quality runoff, the Co-Permittees will comply with requirements of the State Chemists Office and ensure that all Co-Permittee staff utilizing fertilizers and pesticides attend an annual training session on the proper handling, mixing, use, and storage of fertilizers and pesticides. In addition, contracting landscaping companies will be required to provide documentation that they are in compliance with the State Chemists Office. The Co-Permittees will document all activities associated with fertilizer and pesticide management including the areas within the MS4 Area on which herbicides are utilized and an estimate of the amount of each material utilized and the total acreage where pesticides and fertilizers are applied. All information specific to herbicide management will be included in the Co-Permittees' annual SWQMP report.

Flood Management Projects

The Co-Permittees will document that new flood management projects are assessed for their impacts on water quality and that existing flood management projects are examined for incorporation of additional water quality protection devices or practices. During the pre-construction phase for new projects, a determination will be made to see if a practice can be modified to address the reduction of pollutants associated with stormwater runoff or if additional BMPs can be designed into the watershed of the project to improve water quality. This preliminary review will better use limited

resources to plan for water quality BMPs before a project is constructed since water quality and water quantity issues are interrelated.

Existing flood management projects and structural BMPs built to address stormwater quantity problems will be reviewed to determine if it is feasible to retrofit them with stormwater quality control measures. Each existing project and BMP may not support a retrofit, but the review will be conducted and results will be reported in the Co-Permittees' annual SWQMP report.

Canine Park Location

Pet waste has been shown to be a major contributor of stormwater pollution. If applicable and necessary, the Co-Permittees will require that all canine parks be sited at least 150 feet away from a surface waterbody. The Co-Permittees will track the number or percentage and location of canine parks sited at least 150 feet away from a surface waterbody.

Table 8-2 Pollution Prevention and Good Housekeeping BMPs

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
MS4 Conveyance System Maintenance Plan and Documentation	Implement a storm sewer system maintenance schedule and track activities to document the amount of pollution that has been kept from local receiving waters as a result of the Co-Permittees' Stormwater Program.	Ongoing	 Document the amount of litter picked up as a result of periodic litter pickup events. Document the amount of materials removed from the Co-Permittees' storm sewer system and how that material is disposed of. Document the total amount of material collected and number of curb miles swept by the Co-Permittees' Street Sweeping Program. Document all improvements made to roadside shoulders and ditches. Document all improvements made to stormwater outfalls. Track using Programmatic Indicators #23, #24, #25, #26, #27, #28, #29, #30, #31, #32, #33 	County Highway Department Cicero Streets and Utilities Department Cicero Parks Department

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Secondary Containment	 Implement secondary containment devices around areas of chemical storage. 	Ongoing	 Document the number of devices installed, the location of installed devices, and the amount of material collected or contained by the secondary containment devices. Track using Programmatic Indicators #24 and #32. 	All Co-Permittee Departments managing facilities within which chemicals are stored or refueling activities are conducted.
Oil and Water Separator	 Conduct maintenance on all Co-Permittee owned and operated oil and water separators as specified by the manufactures specifications. 	Ongoing	 Document all maintenance conducted. Track using Programmatic Indicator #24. 	All Co-Permittee Facilities with Oil and Water Separators.
Sand and Salt Storage	Conduct regular maintenance and sweeping around salt and sand storage areas.	Ongoing	 Document all containment and maintenance BMPs implemented. Document the amount of salt and sand applied to Co-Permittee roads on an annual basis. Track using Programmatic Indicator #30 and #31. 	County Highway Department County Parks Department County Buildings and Grounds Department Cicero Streets and Utilities Department

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Chemical Spill Response Plan	 Implement Spill Response Plans to minimize the potential for chemical spills to contaminate stormwater runoff. 	Ongoing	 Document all facilities where the response plan is posted and number of staff trained in proper spill response techniques. Track using Programmatic Indicator #24. 	All Co-Permittee Departments managing facilities within which chemicals are stored or refueling activities are conducted.
Disposal of Waste	 Implement procedures to ensure the proper disposal of waste. 	Ongoing	 Document all activities associated with waste disposal including the types of waste generated, the amount of waste generated, and the method by which the waste was disposed. Track using Programmatic Indicator #32. 	County Highway Department County Building and Grounds Department Cicero Streets and Utilities Department
Street Sweeping Program	Track all street sweeping activities.	Ongoing	 Document the number of curb miles swept and the weight of material collected via the Co-Permittees' Street Sweeping Program. Track using Programmatic Indicator #33 	County Highway Department Cicero Streets and Utilities Department
Wash Water Management	 Ensure that vehicle wash waters are routed through appropriate BMPs prior to accessing the storm sewer system. 	Ongoing	 Document that all vehicle and equipment washing is conducted in areas without direct access to the Co-Permittees' storm sewer system. 	All Co-Permittee Departments with vehicle and equipment fleets.

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Snow Disposal Areas	Dispose of snow in designated areas to minimize runoff from snowmelt.	Ongoing	Document that plowed snow is stored in areas that minimize the potential impact to stormwater runoff.	County Highway Department Cicero Street and Utilities Department
Annual IDDE, Good Housekeeping, & Pollution Prevention Staff Training	 Implement an annual IDDE and Good Housekeeping training program. Conduct annual refresher training. 	Annually	 Document number of staff trained, number of training events held, and the curriculum covered in each training session. Track using Programmatic Indicator #2 and #3. 	County Surveyor's Office County Highway Department County Parks Department County Buildings and Grounds Department County Health Department Cicero Streets and Utilities Department Cicero Parks Department

Best Management Practice (BMP)	Measurable Goals	Timeline	Documentation and Tracking	Responsible Party
Fertilizer and Pesticide Management	Train appropriate staff on appropriate use of fertilizers and pesticides.	Ongoing	 Document all trainings conducted. Document that contractors have appropriate certifications through the OISC. Track using programmatic indicator #25. 	County Highway Department County Parks Department Cicero Parks Department Cicero Street and Utilities Department
Flood Management Projects	Document that all new flood management projects are assessed for incorporation of additional water quality devices or practices.	Future Flood Management Projects.	Document that all new flood management projects are assessed for incorporation of additional water quality devices or practices.	County Surveyor's Office Cicero Street and Utilities Department
Canine Park Location	If and when applicable, the Co-Permittees will track the number or percentage and location of canine parks sited at least 150 feet away from a surface waterbody.	If and when necessary.	Track using Programmatic Indicator #34.	County Parks Department

MS4 PROGRAM COSTS

9.0

Rule 13 requires a summary of the current stormwater budget, expected or actual funding sources, and a projection of the budget for each year within the 5-year permit term. Resources used for developing and implementing the Stormwater Program should be documents in order to demonstrate that monies, equipment, and staff are being and will be utilized for the program.

9.1 DETAILED PART C IMPLEMENTATION COSTS BY MCM FROM 2004-2008

This section details the cost of implementing the program described in this document. These estimates are taken from the Co-Permittees' SWQMP Part A Renewal submitted in September 2008, and are based on the Co-Permittees' experience in implementing their Stormwater Program. These are estimates of what the Co-Permittees' may spend on the program and should not be utilized for compliance purposes.

MCM #1 Public Education and Outreach: The cost to implement this MCM throughout this 5-year permit term is estimated to be \$71,000. The annual average costs for this MCM is estimated to be \$14,200. These costs will cover such tasks as reproduction and distribution of educational brochures, website development and maintenance, and other tasks as outlined in Chapter 3.

MCM #2 Public Participation and Involvement: The cost to implement MCM #2 throughout this 5-year permit term is estimated to be \$80,000. The annual average costs for this MCM is estimated to be \$16,000. This cost will cover such tasks as promoting Clean-Up Events, implementing the Report-A-Polluter Program, and implementing Storm Drain Marking events.

MCM #3 Illicit Discharge Detection and Elimination: The cost to implement MCM #3 throughout this 5-year permit term is estimated to be \$455,000. Annual costs associated with this MCM are estimated to be \$91,000 per year. These costs are primarily associated with developing and updating comprehensive storm sewer system maps as required by this MCM. Other costs are associated with conducting dry weather screening events and identifying and eliminating illicit discharges to the storm sewer system.

MCM #4 Construction Site Runoff Control: The cost to implement MCM #4 throughout this 5-year permit term is estimated to be \$955,000. Annual costs for this MCM are estimated be \$191,000 These costs are associated with conducting plan reviews and site inspections and include staffing expenses as well as training requirements.

MCM #5 Post-Construction Stormwater Management: The cost to implement MCM #5 throughout this 5-year permit term is estimated to be \$955,000. Annual costs for this MCM are estimated be \$191,000. These costs are associated with conducting plan reviews and site inspections and include staffing expenses as well as training requirements.



MCM #6 Pollution Prevention and Good Housekeeping: The cost to implement MCM #6 throughout this 5-year permit term is estimated to be \$100,000. Average annual costs associated with this MCM are estimated to be \$20,000 per year. These costs are associated with the implementation of Salt and Sand Storage BMPs, implementing an MS4 Conveyance System Maintenance Plan, conducting storm sewer system maintenance, and providing training to maintenance and field staff.

Other Costs:

In addition to these costs, the Co-Permittees estimate that they will spend an estimated \$409,000 managing the day-to-day administrative and programmatic aspects of the Stormwater Program over this 5-year permit term. These costs are associated with staffing as well as monthly and annual reporting requirements. **Table 9-1** summarizes total program costs as identified above.

Table 9-1
Total Program Cost

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	Nov 2008- October 2009	Nov 2009- October 2010	Nov 2010- October 2011	Nov 2011- October 2012	Nov 2012- October 2013	Total
Implement MCM1	\$14,200	\$14,200	\$14,200	\$14,200	\$14,200	\$42,600
Implement MCM2	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$80,000
Implement MCM3	\$91,000	\$91,000	\$91,000	\$91,000	\$91,000	\$455,000
Implement MCM4	\$191,000	\$191,000	\$191,000	\$191,000	\$191,000	\$955,000
Implement MCM5	\$191,000	\$191,000	\$191,000	\$191,000	\$191,000	\$955,000
Implement MCM6	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
Other Costs	\$81,800	\$81,800	\$81,800	\$81,800	\$81,800	\$409,000
Total	\$605,000	\$605,000	\$605,000	\$605,000	\$605,000	\$3,025,000

The Town of Cicero's portion of these costs will come from the Town's Stormwater Utility which charges a flat rate of \$3.15 on all Town rate payers. Hamilton County does not have a dedicated funding source for stormwater management. The County's ability to provide the funding listed above is severely limited. In order to implement the requirements of Rule 13, the County will rely on a combination of permit fees and general fund dollars. However, general fund dollars will be severely limited due to recent legislation by the State regarding local government taxing limits. Therefore, the County Commissioners have determined that a stormwater utility will not be created.

10.0 SUMMARY

Implementation of the Co-Permittees' SWQMP will improve the overall quality of stormwater discharges entering into the Co-Permittees' separate storm sewer system. In order to successfully implement the Rule 13 program, the Co-Permittees must pay attention to reporting requirements contained in the Programmatic Indicators, adhere to mandated time lines, and be aware of next steps beyond the Part C document.

10.1 PROGRAMMATIC INDICATORS

As a visual aid to Hamilton County and to help evaluate Rule 13 permit compliance, **Table 10-1** lists the Programmatic Indicators that are required in Rule 13. The table further identifies those required and chosen BMPs that will fulfill these required Programmatic Indicators.

Table 10-1 Programmatic Indicators

Programmatic indicators			
Programmatic Indicator	Description	BMP Addressing Programmatic Indicator	
1	Number or percentage of citizens, segregated by type of constituent that have an awareness of stormwater quality issues.	 Stormwater Website Hamilton County Phase II Public Education Steering Committee Rule 13 Public Participation Lists Public Meetings SWCD Activities Storm Drain Marking Clean-up Events Stormwater Survey Stormwater Brochures Stormwater Newsletter Mass Media Solicitations 	
2	Number and description of meetings, training sessions, and events conducted to involve citizen constituents in the Stormwater Program.	 HHW Promotions Rule 13 Public Participation Lists Hamilton County Phase II Public Education Steering Committee Public Meetings SWCD Activities Storm Drain Marking Report-A-Polluter Program Annual IDDE, Good Housekeeping, & Pollution Prevention Staff Training 	

Programmatic Indicator	Description	BMP Addressing Programmatic Indicator
		 Clean-up Events Stormwater Survey Erosion and Sediment Control and Post-Construction Training
3	Number or percentage of citizen constituents that participate in stormwater quality improvement programs.	 Clean-Up Events SWCD Activities Rule 13 Public Participation Lists Hamilton County Phase II Public Education Steering Committee Public Meetings Storm Drain Marking Report-A-Polluter Program Annual IDDE, Good Housekeeping, & Pollution Prevention Staff Training Erosion and Sediment Control and Post Construction Staff Training Report-A-Polluter Program HHW Promotions
4	Number and location of storm drains marked or cast, segregated by marking method.	Storm Drain MarkingStormwater System Map
5	Estimated or actual linear feet or percentage of MS4 mapped and indicated on an MS4 Area map.	Stormwater System Map
6	Number and location of MS4 Area outfalls mapped.	Stormwater System Map
7	Number and location of MS4 Area outfalls screened for illicit discharges.	 Illicit Discharge Detection and Elimination Ordinance Illicit Discharge Detection and Elimination Plan
8	Number and location of illicit discharges detected.	 Illicit Discharge Detection and Elimination Ordinance Illicit Discharge Detection and Elimination Plan

Programmatic Indicator	Description	BMP Addressing Programmatic Indicator
9	Number and location of illicit discharges eliminated.	 Illicit Discharge Detection and Elimination Ordinance Illicit Discharge Detection and Elimination Plan
10	Number of and estimated or actual amount of material, segregated by type, collected from HHW collections in the MS4 Area.	■ HHW Promotions
11	Number and location of constituent drop-off centers for automotive fluid recycling.	■ HHW Promotions
12	Number or percentage of constituents that participate in the HHW collections.	■ HHW Promotions
13	Number of construction sites obtaining an MS4 entity-issued stormwater run-off permit in the MS4 Area.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database
14	Number of construction sites inspected.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database
15	Number and type of enforcement actions taken against construction site operators.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database Procedures for Prioritizing Construction Activities
16	Number of, and associated construction site name and location for, public informational requests received.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database
17	Number, type, and location of structural BMPs installed.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database

Programmatic Indicator	Description	BMP Addressing Programmatic Indicator
18	Number, type, and location of structural BMPs inspected.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database
19	Number, type, and location of structural BMPs maintained or improved to function properly.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database Post-Construction BMP O&M Plan
20	Type and location of nonstructural BMPs utilized.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database
21	Estimated or actual acreage or square footage of open space preserved and mapped in the MS4 Area, if applicable.	 Erosion and Sediment Control and Post-Construction BMP Tracking Database
22	Estimated or actual acreage or square footage of pervious and impervious surfaces mapped in the MS4 Area, if applicable.	 N/A - The Co-Permittees are currently not capable of tracking this information,
23	Number and location of new retail gasoline outlets or municipal, state, federal, or institutional refueling areas, or outlets or refueling areas that replaced existing tank systems that have installed stormwater BMPs.	MS4 Conveyance System Maintenance Plan and Documentation
24	Number and location of MS4 entity facilities that have containment for accidental releases of stored polluting	 MS4 Conveyance System Maintenance Plan and Documentation Secondary Containment

Programmatic Indicator	Description	BMP Addressing Programmatic Indicator
	materials.	Oil and Water Separator Installation and MaintenanceChemical Spill Response Plan
25	Estimated or actual acreage or square footage, amount, and location where pesticides and fertilizers are applied by a regulated MS4 entity to places where stormwater can be exposed within the MS4 Area.	 Fertilizer and Pesticide Management MS4 Conveyance System Maintenance Plan and Documentation
26	Estimated or actual linear feet or percentage and location of unvegetated swales and ditches that have an appropriately-sized vegetated filter strip.	MS4 Conveyance System Maintenance Plan and Documentation
27	Estimated or actual linear feet or percentage and location of MS4 conveyances cleaned or repaired.	 MS4 Conveyance System Maintenance Plan and Documentation
28	Estimated or actual linear feet or percentage and location of roadside shoulders and ditches stabilized, if applicable.	 MS4 Conveyance System Maintenance Plan and Documentation
29	Number and location of stormwater outfall areas remediated from scouring conditions, if applicable.	 MS4 Conveyance System Maintenance Plan and Documentation

Programmatic Indicator	Description	BMP Addressing Programmatic Indicator
30	Number and location of deicing salt and sand storage areas covered or otherwise improved to minimize stormwater exposure.	 Salt and Sand Storage MS4 Conveyance System Maintenance Plan and Documentation
31	Estimated or actual amount, in tons, of salt and sand used for snow and ice control.	 Salt and Sand Storage MS4 Conveyance System Maintenance Plan and Documentation
32	Estimated or actual amount of material by weight collected from catch basin, trash rack, or other structural BMP cleaning.	 MS4 Conveyance System Maintenance Plan and Documentation Secondary Containment Waste Disposal
33	Estimated or actual amount of material by weight collected from street sweeping, if utilized.	 Street Sweeping Program MS4 Conveyance System Maintenance Plan and Documentation
34	If applicable, number or percentage and location of canine parks sited at least one hundred fifty (150) feet away from a surface waterbody.	Canine Park Location

10.2 Master Timeline

The following Master Time outlines all BMPs that have been and will be completed by the Co-Permittees during this permit term.

Table 10-2 Master Timeline

P	_	waster rimeline
Permit Year	МСМ	ВМР
2008-2009	1	 Hamilton County Phase II Public Education Steering Committee Public Meetings Stormwater Survey Stormwater Brochures Newsletter Articles HHW and Recycling Program Promotions Stormwater Website SWCD Activities Mass Media Solicitation
	2	 Hamilton County Phase II Public Education Steering Committee Clean-up Events Storm Drain Marking HHW and Recycling Program Promotions SWCD Activities Report A Polluter Rule 13 Public Participation Lists
	3	 Stormwater System Map IDDE Ordinance IDDE Plan Implementation Report-A-Polluter Storm Drain Marking HHW and Recycling Program Promotions Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training

	4	 Erosion and Sediment Control Ordinance Plan Review, Site Inspection, and Enforcement Staff Training Erosion & Sediment Control and Post-construction BMP Tracking Database Training for Construction Professionals Procedure for Prioritizing Construction Activities Inspection and Enforcement Documentation QA/QC of Overall Program
	5	 Post-construction Control Ordinance Plan Review, Site Inspection, and Enforcement Staff Training Post-Construction BMP O&M Manual Inspection and Enforcement Documentation Training for Construction Professionals Erosion & Sediment Control and Post-construction BMP Tracking Database
	6	 MS4 Conveyance System Maintenance Plan and Documentation Secondary Containment Oil & Water Separator Salt and Sand Storage Chemical Spill Response Disposal of Waste Street Sweeping Program Wash Water Management Snow Disposal Fertilizer and Pesticide Management Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training
2009- 2010	1	 Hamilton County Phase II Public Education Steering Committee Public Meetings Stormwater Survey Stormwater Brochures Newsletter Articles HHW and Recycling Program Promotions Stormwater Website SWCD Activities Mass Media Solicitation

	Hamilton County Phase II Public Education Steering Committee
	Clean-up Events
2	Storm Drain Marking
_	HHW and Recycling Program Promotions
	SWCD Activities
	Rule 13 Public Participation Lists
	Report-A-Polluter
	Stormwater System Map
	IDDE Ordinance
	IDDE Plan Implementation
3	Report-A-Polluter
O	Storm Drain Marking
	HHW and Recycling Program Promotions
	Annual IDDE, Good Housekeeping, and Pollution Prevention
	Staff Training
	Erosion and Sediment Control Ordinance
	Plan Review, Site Inspection, and Enforcement
	Staff Training
4	Erosion & Sediment Control and Post-construction BMP
4	Tracking Database
	Training for Construction Professionals
	Procedure for Prioritizing Construction Activities
	Inspection and Enforcement Documentation
	QA/QC of Overall Program Post Construction Control Outlineses
	Post-Construction Control Ordinance Plan Parisary Site Inspection and Enforcement
	Plan Review, Site Inspection, and Enforcement Staff Training
	Staff Training Post Construction BMD OSM Manual
5	Post-Construction BMP O&M Manual Inspection and Enforcement Desumentation
	Inspection and Enforcement Documentation Training for Construction Professionals
	 Training for Construction Professionals Erosion & Sediment Control and Post-construction BMP
	Tracking Database

		MS4 Conveyance System Maintenance Plan and
		Documentation
		Secondary Containment
		Oil & Water Separator
		Salt and Sand Storage
		Chemical Spill Response
	6	Disposal of Waste
		Street Sweeping Program
		Wash Water Management
		Snow Disposal
		Fertilizer and Pesticide Management
		Annual IDDE, Good Housekeeping, and Pollution Prevention
		Staff Training
		Hamilton County Phase II Public Education Steering
		Committee
		Public Meetings
		Stormwater Survey
		Stormwater Brochures
	1	Newsletter Articles
		HHW and Recycling Program Promotions
		Stormwater Website
		SWCD Activities
		Mass Media Solicitation
		Hamilton County Phase II Public Education Steering
		Committee
2010-		Clean-up Events
2011	0	Storm Drain Marking
	2	HHW and Recycling Program Promotions
		SWCD Activities
		Report A Polluter
		Rule 13 Public Participation Lists
		Stormwater System Map
		IDDE Ordinance
		IDDE Plan Implementation
	3	Report-A-Polluter
		Storm Drain Marking
		HHW and Recycling Program Promotions
		Annual IDDE, Good Housekeeping, and Pollution Prevention
		Staff Training

	4	 Erosion and Sediment Control Ordinance Plan Review, Site Inspection, and Enforcement Staff Training Erosion & Sediment Control and Post-construction BMP Tracking Database Training for Construction Professionals Procedure for Prioritizing Construction Activities Inspection and Enforcement Documentation QA/QC of Overall Program
	5	 Post-construction Control Ordinance Plan Review, Site Inspection, and Enforcement Staff Training Post-Construction BMP O&M Manual Inspection and Enforcement Documentation Training for Construction Professionals Erosion & Sediment Control and Post-construction BMP Tracking Database
	6	 MS4 Conveyance System Maintenance Plan and Documentation Secondary Containment Oil & Water Separator Salt and Sand Storage Chemical Spill Response Disposal of Waste Street Sweeping Program Wash Water Management Snow Disposal Fertilizer and Pesticide Management Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training
2011- 2012	1	 Hamilton County Phase II Public Education Steering Committee Public Meetings Stormwater Survey Stormwater Brochures Newsletter Articles HHW and Recycling Program Promotions Stormwater Website SWCD Activities Mass Media Solicitation

2	 Hamilton County Phase II Public Education Steering Committee Clean-up Events Storm Drain Marking HHW and Recycling Program Promotions SWCD Activities Rule 13 Public Participation Lists Report-A-Polluter
3	 Stormwater System Map IDDE Ordinance IDDE Plan Implementation Report-A-Polluter Storm Drain Marking HHW and Recycling Program Promotions Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training
4	 Erosion and Sediment Control Ordinance Plan Review, Site Inspection, and Enforcement Staff Training Erosion & Sediment Control and Post-construction BMP Tracking Database Training for Construction Professionals Procedure for Prioritizing Construction Activities Inspection and Enforcement Documentation QA/QC of Overall Program
5	 Post-Construction Control Ordinance Plan Review, Site Inspection, and Enforcement Staff Training Post-Construction BMP O&M Manual Inspection and Enforcement Documentation Training for Construction Professionals Erosion & Sediment Control and Post-construction BMP Tracking Database

		MS4 Conveyance System Maintenance Plan and Documentation
		Secondary Containment
		Oil & Water Separator
		Salt and Sand Storage
	0	Chemical Spill Response Dispass of Master
	6	Disposal of WasteStreet Sweeping Program
		Wash Water Management
		Snow Disposal
		Fertilizer and Pesticide Management
		Annual IDDE, Good Housekeeping, and Pollution Prevention
		Staff Training
		Hamilton County Phase II Public Education Steering Committee
		Public Meetings
		Stormwater Survey
	1	Stormwater Brochures
		Newsletter Articles
		HHW and Recycling Program PromotionsStormwater Website
		Stormwater WebsiteSWCD Activities
		Mass Media Solicitation
		Hamilton County Phase II Public Education Steering Committee
2012-		Clean-up Events
2013	2	Storm Drain Marking
	2	HHW and Recycling Program Promotions
		SWCD Activities
		Report A PolluterRule 13 Public Participation Lists
		Stormwater System Map
		IDDE Ordinance
		IDDE Plan Implementation
	3	Report-A-Polluter
		Storm Drain Marking HIVW and Basysting Dragger Branching
		HHW and Recycling Program Promotions Appual IDDE Good Housekeeping, and Pollution Provention
		 Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training

4	 Erosion and Sediment Control Ordinance Plan Review, Site Inspection, and Enforcement Staff Training Erosion & Sediment Control and Post-construction BMP Tracking Database Training for Construction Professionals Procedure for Prioritizing Construction Activities Inspection and Enforcement Documentation QA/QC of Overall Program
5	 Post-construction Control Ordinance Plan Review, Site Inspection, and Enforcement Staff Training Post-Construction BMP O&M Manual Inspection and Enforcement Documentation Training for Construction Professionals Erosion & Sediment Control and Post-construction BMP Tracking Database
6	 MS4 Conveyance System Maintenance Plan and Documentation Secondary Containment Oil & Water Separator Salt and Sand Storage Chemical Spill Response Disposal of Waste Street Sweeping Program Wash Water Management Snow Disposal Fertilizer and Pesticide Management Annual IDDE, Good Housekeeping, and Pollution Prevention Staff Training

10.3 NEXT STEPS

As progress is made in implementing the Co-Permittees' Stormwater Quality Management Plan, elements contained in required annual program reports, monthly construction reports, and on-going water quality characterizations will need to be tracked. Rule 13 does provide program flexibility in that if a BMP proves to be ineffective or infeasible, then the Co-Permittees may change their program and incorporate a different BMP.

Annual Reports

During the second permit term, the Co-Permittees are required to submit annual reports every 2 years. During the second permit term the City will submit reports in years 2010 and 2012. These reports must include:

- Progress towards development, implementation, and enforcement of all MCMs, including updated Programmatic Indicator data;
- A summary of complaints received and follow-up investigation results related to stormwater quality issues;
- Updated measurable goals;
- Stormwater BMPs installed or initiated;
- Follow-up or additional water quality characterization information;
- An updated active industrial facilities list;
- Implementation problems encountered, including BMP changes due to ineffectiveness or infeasibility;
- Funding sources and expenditures;
- Changes to MS4 Area boundaries, including land areas added to the MS4 Area via annexation or other similar means;
- Identified stormwater quality improvement projects; and
- Updated receiving water information.

Monthly Construction Site Activity Reports

The Co-Permittees must submit monthly construction site project summary reports no later than the last day of the following month to IDEM. If no projects occur within a given month, a report does not need to be submitted. Reports must include those projects for which there has been a new permit application or termination notice and must contain:

- A list of all construction and post-construction project site names;
- Project site addresses;
- · Project site construction duration timeframes; and
- An indication of enforcement actions undertaken.

Agency Inspections

To evaluate Rule 13 permit compliance, IDEM staff may periodically inspect the Co-Permittees and review their Stormwater Program. The MS4 Operator should be prepared to answer questions and provide documentation of program elements. The point of contact for such inspections will be the County Surveyor's Office. The Surveyor's Office may call upon responsible entities identified in the BMP tables for assistance in such inspections. IDEM may request data to facilitate the identification or qualification of pollutants that may be released to the environment from an MS4 conveyance or to determine effectiveness of the MCMs.

On-going Water Quality Characterization

As new water quality information becomes available and updates are made to data sources that were reviewed as part of the County's SWQMP – Part B: Baseline Water Quality Report, the Co-Permittees will review that information and adjust their Rule 13 program accordingly. As reports such as this become available, the Co-Permittees can review this information and compare it to their list of priority watersheds identified in their Part B submittal. If different areas are identified as needing additional measures,



then the Co-Permittees may adjust their priorities for program implementation or adjust or add program elements to address newly identified concerns. In addition, the Co-Permittees will utilize results of dry weather screening events to help characterize receiving water quality. As funding allows, the Co-Permittees will conduct studies of 14-digit watersheds within Hamilton County.

Ongoing Regional Coordination

In April of 2002, the Co-Permittees and other Hamilton County Stormwater Phase II communities developed the Hamilton County Stormwater Phase II Steering Committee. The Steering Committee has been dedicated to maximizing consistency in Stormwater Programs throughout Hamilton County ever since. Monthly meetings have allowed Phase II communities throughout Hamilton County to share ideas and strategize on how to develop optimally efficient and effective Stormwater Programs. The Copermittees plan to continue actively participating in the Steering Committee throughout this permit term, but the frequency of these meetings will vary depend on priorities.

Rule 13 Permit Renewal

Permit renewal applications are due at least 60 days prior to the expiration date for the Rule 13 permit. The Co-Permittees' permit renewal will be due in September 2013. Permit coverage under the renewed NOI will begin on the date of expiration from the previous 5-year permit term. IDEM may reissue permits on a watershed basis, which may change these dates. Subsequent permits will require the Co-Permittees to maintain and, where possible, improve their performance in implementing the 6 MCMs.

Appendix 1

REFERENCES

- Christopher B. Burke Engineering, Ltd. NPDES Phase II General Permit Application, Stormwater Quality Management Plan, Part B: Baseline Characterization Report, Hamilton County, Indiana. May 2004.
- Goode & Associates. Stormwater Phase II Needs Analysis and Feasibility Study. December 2002.
- Indiana Department of Environmental Management. 327 IAC 15-13 Final Rule. August 2003.
- Indiana Department of Environmental Management. Rule 13 Guidance Document. May 2003.
- U.S. EPA Office of Water. Stormwater Phase II Compliance Assistance Guide. March 2000.
- U.S. EPA Office of Water, Stormwater Phase II Final Rule. January 2000.

Appendix 2

GLOSSARY OF TERMS

Although all of the acronyms and definitions listed below may have not been used in this document, the additional terminology is provided to assist the user of the document in understanding technical terminology associated with IDEM Rule 13 and NPDES Phase II regulations.

ACRONYMS

ASTM American Society of Testing and Materials

BMP Best Management Practice

CBBEL Christopher B. Burke Engineering, Ltd.

COE United States Army Corps of Engineers

CWA Clean Water Act

EPA Environmental Protection Agency

FEMA Federal Emergency Management Agency

GIS Geographical Information System

GPS Global Positioning System

HHW Household Hazardous Waste

IDDE Illicit Discharge Detection and Elimination

IDEM Indiana Department of Environmental Management

IDNR Indiana Department of Natural Resources

MCM Minimum Control Measure

MS4 Municipal Separate Storm Sewers

NOI Notice of Intent

NPDES National Pollution Discharge Elimination System

O&M Operation and Maintenance

POTW Publicly Owned Treatment Works

Qwq Water Quality Discharge

SWCD Soil and Water Conservation District

SWMD Solid Waste Management District

SWQMP Stormwater Quality Management Plan

TSS Total Suspended Solids

WQv Water Quality Volume

DEFINITIONS

Base Flow. Stream discharge derived from groundwater sources as differentiated from surface runoff. Sometimes considered to include flows from regulated lakes or reservoirs.

Buffer Strip. An existing, variable width strip of vegetated land intended to protect water quality and habitat.

Catch Basin. A chamber usually built at the curb line of a street for the admission of surface water to a storm sewer or subdrain, having at its base a sediment sump designed to retain grit and detritus below the point of overflow.

Channel. A portion of a natural or artificial watercourse which periodically or continuously contains moving water, or which forms a connecting link between two bodies of water. It has a defined bed and banks which serve to confine the water.

Conveyance. Any structural method for transferring stormwater between at least two points.

County Surveyor. A constitutional officer of the County, elected to a 4-year term from the County at large. Primary duties of the surveyor include maintaining annexation descriptions, legal survey book, and section corner record book. Surveyor is also an ex-officio member of the County Drainage Board and the technical authority on the construction, reconstruction, and maintenance of all regulated drains or proposed regulated drains in the County. Other major responsibilities of the surveyor include administering filter strip programs, membership in the County Plan Commission, and certification to the Indiana Alcoholic Beverage Commission.

Detention. Managing stormwater runoff by temporary holding and controlled release.

Discharge. Usually the rate of water flow. A volume of fluid passing a point per unit time commonly expressed as cubic feet per second, cubic meters per second, gallons per minute, or millions of gallons per day.

Ditch. A man-made, open drainageway in or into which excess surface water or groundwater drained from land, stormwater runoff, or floodwaters flow either continuously or intermittently.

Drain. A buried slotted or perforated pipe or other conduit (subsurface drain) or a ditch (open drain) for carrying off surplus groundwater or surface water.

Drainage. The removal of excess surface water or groundwater from land by means of ditches or subsurface drains. Also see Natural drainage.

Drainage Area. The area draining into a stream at a given point. It may be of different sizes for surface runoff, subsurface flow and base flow, but generally the surface runoff area is considered as the drainage area.

Drainage Board. A board consisting of 3 to five persons including the County executive (commissioners) or members appointed by the executive body (at least one of the Board member must be a County executive). The County Surveyor serves on the Board as an ex-officio, non-voting member. In a County having a consolidated city, the department of public works of the consolidated city comprises the drainage board. The Board is responsible for adopting drain classifications and a long-range plan, and for making decisions regarding the design, construction, reconstruction, and/or maintenance of regulated drains in the County.

Environment. The sum total of all the external conditions that may act upon a living organism or community to influence its development or existence.

Erosion. The wearing away of the land surface by water, wind, ice, gravity, or other geological agents. The following terms are used to describe different types of water erosion:

- Accelerated erosion--Erosion much more rapid than normal or geologic erosion, primarily as a result of the activities of man.
- Channel erosion --An erosion process whereby the volume and velocity of flow wears away the bed and/or banks of a well-defined channel.
- Gully erosion --An erosion process whereby runoff water accumulates in narrow channels and, over relatively short periods, removes the soil to considerable depths, ranging from 1-2 ft. to as much as 75-100 ft.
- Rill erosion--An erosion process in which numerous small channels only several inches deep are formed; occurs mainly on recently disturbed and exposed soils (see Rill).
- Splash erosion--The spattering of small soil particles caused by the impact of raindrops on wet soils; the loosened and spattered particles may or may not be subsequently removed by surface runoff.
- Sheet erosion--The gradual removal of a fairly uniform layer of soil from the land surface by runoff water.

Filter Strip. Usually a long, relatively narrow area (usually, 20-75 feet wide) of undisturbed or planted vegetation used to retard or collect sediment for the protection of watercourses, reservoirs, or adjacent properties. See also Classified Filter Strip.

Floatable. Any solid waste that will float on the surface of the water.

Flood or Flood Waters. A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow, the unusual and rapid accumulation, or the runoff of surface waters from any source.

Floodplain. The channel proper and the areas adjoining the channel which have been or hereafter may be covered by the regulatory or 100-year flood. Any normally dry land area that is susceptible to being inundated by water from any natural source. The floodplain includes both the floodway and the floodway fringe districts.

Floodway. The channel of a river or stream and those portions of the flood plains adjoining the channel which are reasonably required to efficiently carry and discharge the peak flow of the regulatory flood of any river or stream.

Grade. (1) The slope of a road, a channel, or natural ground. (2) The finished surface of a canal bed, roadbed, top of embankment, or bottom of excavation; any surface prepared to a design elevation for the support of construction, such as paving or the laying of a conduit. (3) To finish the surface of a canal bed, roadbed, top of embankment, or bottom of excavation, or other land area to a smooth, even condition.

Habitat. The environment in which ,he life needs of a plant or animal are supplied.

Household Hazardous Waste. Solid waste generated by households that is ignitable, toxic, reactive, corrosive, or otherwise poses a threat to human health or the environment.

Illicit Discharge. Any discharge to an MS4 conveyance that is not composed entirely of stormwater.

Impervious. Not allowing infiltration.

INDOT. Indiana Department of Transportation. Generally used here to refer to specifications contained in the publication "INDOT Standard Specifications."

Infiltration. Passage or movement of water into the soil.

Minimum Control Measure (MCM). Minimum measures required by the NPDES Phase II program. The six (6) MCMs are: Public Education and Outreach, Public Participation and Involvement, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Runoff Control, and Pollution Prevention and Good Housekeeping.

MS4 Operator. The person responsible for development, implementation, or enforcement of the MCMs for a designated MS4 Area.

Municipal Separate Storm Sewer System. An MS4: (1) is a conveyance or system of conveyances owned by the state, County, city, town, or other public entity; (2)

discharges to waters of the U.S.; (3) is designed or used for collecting or conveying stormwater; (4) is not a combined sewer; and, (5) is not part of a Publicly Owned Treatment Works (POTWs).

National Pollution Discharge Elimination System. A permit developed by the U.S. EPA through the Clean Water Act. In Indiana, the permitting process has been delegated to IDEM. This permit covers aspects of municipal stormwater quality.

Nutrient(s). (1) A substance necessary for the growth and reproduction of organisms. (2) In water, those substances (chiefly nitrates and phosphates) that promote growth of algae and bacteria.

Open Drain. A natural watercourse or constructed open channel that conveys drainage water.

Open Space. Any land area devoid of any disturbed or impervious surfaces created by industrial, commercial, residential, agricultural, or other manmade activities.

Outfall. The point, location, or structure where wastewater or drainage discharges from a pipe or open drain to a receiving body of water.

Outlet. The point of water disposal from a stream, river, lake, tidewater, or artificial drain.

Pervious. Allowing movement of water.

Pesticides. Chemical compounds used for the control of undesirable plants, animals, or insects. The term includes insecticides, herbicides, algicides, rodenticides, nematicides, fungicides, and growth regulators.

pH. A numerical measure of hydrogen ion activity, the neutral point being 7.0. All pH values below 7.0 are acid, and all above 7.0 are alkaline.

Piping. The formation of "pipes" by underground erosion. Water in the soil carries the fine soil particles away, and a series of eroded tubes or tunnels develop. These openings will grow progressively larger and can cause a dam failure.

Professional Engineer. A person licensed under the laws of the State of Indiana to practice professional engineering.

Programmatic Indicator. Any data collected by an MS4 entity that is used to indicate implementation of one (1) or more minimum control measures.

Publicly Owned Treatment Works. A municipal operation that breaks down and removes contaminants in wastewater prior to discharging to a stream through primary and/or secondary treatment systems.

Receiving Stream. The body of water into which runoff or effluent is discharged.

Recharge. Replenishment of groundwater reservoirs by infiltration and transmission from the outcrop of an aquifer or from permeable soils.

Redevelopment. Alterations of a property that change a site or building in such a way that there is disturbances of one (1) acre or more of land.

Regulated Drain. A drain, either open channel or closed tile/sewer, subject to the provisions of the Indiana Drainage Code, I.C.-36-9-27.

Regulatory Flood. The discharge or elevation associated with the 100-year flood as calculated by a method and procedure which is acceptable to and approved by the Indiana Department of Natural Resources and the Federal Emergency Management Agency. The "regulatory flood" is also known as the "base flood".

Reservoir. A natural or artificially created pond, lake or other space used for storage, regulation or control of water. May be either permanent or temporary. The term is also used in the hydrologic modeling of storage facilities.

Runoff. That portion of precipitation that flows from a drainage area on the land surface, in open channels, or in stormwater conveyance systems.

Sand. (1) Soil particles between 0.05 and 2.0 mm in diameter. (2) A soil textural class inclusive of all soils that are at least 70% sand and 15% or less clay.

Sediment. Solid material (both mineral and organic) that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface.

Slope. Degree of deviation of a surface from the horizontal, measured as a numerical ratio or percent. Expressed as a ratio, the first number is commonly the horizontal distance (run) and the second is the vertical distance (rise)--e.g., 2:1. However, the preferred method for designation of slopes is to clearly identify the horizontal (H) and vertical (V) components (length (L) and Width (W) components for horizontal angles). Also note that according to international standards (Metric), the slopes are presented as the vertical or width component shown on the numerator--e.g., 1V:2H. Slope expressions in this handbook follow the common presentation of slopes--e.g., 2:1 with the metric presentation shown in parenthesis--e.g., (1V:2H). Slopes can also be expressed in "percents". Slopes given in percents are always expressed as (100*V/H) --e.g., a 2:1 (1V:2H) slope is a 50% slope.

Soil. The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. Also see alluvial

soil, Clay, Cohesive soil, Loam, Permeability (soil), Sand, Silt, Soil horizon, Soil profile, Subsoil, Surface soil, Topsoil.

Soil and Water Conservation District (SWCD). A public organization created under state law as a special-purpose district to develop and carry out a program of soil, water, and related resource conservation, use, and development within its boundaries. A subdivision of state government with a local governing body.

Solid Waste. Any garbage, refuse, debris, or other discarded material.

Stormwater. Water resulting from rain, melting or melted snow, hail, or sleet.

Stormwater Runoff. The water derived from rains falling within a tributary basin, flowing over the surface of the ground or collected in channels or conduits.

Stormwater Quality Management Plan (SWQMP). A comprehensive written document that addresses stormwater runoff quality within an MS4 Area. The SWQMP is divided into three (3) submittal parts: Part A – Initial Application, Part B – Baseline Characterization and On-going Monitoring Plan, and Part C – Program Implementation.

Storm Sewer. A sewer that carries stormwater, surface drainage, street wash, and other wash waters but excludes sewage and industrial wastes. Also called a storm drain.

Subwatershed. A watershed subdivision of unspecified size that forms a convenient natural unit.

Swale. An elongated depression in the land surface that is at least seasonally wet, is usually heavily vegetated, and is normally without flowing water. Swales conduct stormwater into primary drainage channels and may provide some groundwater recharge.

Tributary. Based on the size of the contributing drainage area, a smaller watercourse which flows into a larger watercourse.

Urbanized Area. A land area comprising one (1) or more places that together have a residential population of at least fifty thousand (50,000) and an overall population density of at least five hundred (500) people per square mile.

Water Quality. A term used to describe the chemical, physical, and biological characteristics of water, usually in respect to its suitability for a particular purpose.

Watercourse. Any river, stream, creek, brook, branch, natural or man-made drainageway in or into which stormwater runoff or floodwaters flow either continuously or intermittently.

Watershed. The region drained by or contributing water to a specific point that could be along a stream, lake or other stormwater facilities. Watersheds are often broken down into subareas for the purpose of hydrologic modeling.

Watershed Area. All land and water within the confines of a drainage divide. See also Watershed.

Weir. A channel-spanning structure for measuring or regulating the flow of water.

Wetlands. Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions and/or those wetland areas that are under the COE jurisdiction.

Appendix 3 Memorandum of Agreement Between the Hamilton County Soil and
Water Conservation District and
Hamilton County Board of Commissioners

Appendix 4 Public Education and Outreach Memorandum of Understanding

Appendix 5 SWQMP PART C: PROGRAM IMPLEMENTATION CERTIFICATION CHECKLIST

Appendix 6 CERTIFICATION OF THE INFORMATIONAL PROGRAM FOR THE PUBLIC EDUCATION AND OUTREACH MCM

Appendix 7 CERTIFICATION OF THE PUBLIC PARTICIPATION AND INVOLVEMENT PROGRAM FOR THE PUBLIC PARTICIPATION AND INVOLVEMENT MCM

Appendix 8 CERTIFICATION OF THE PLAN TO DETECT, ADDRESS AND ELIMINATE ILLICIT DISCHARGES FOR THE ILLICIT DETECTION AND ELIMINATION MCM

Appendix 9 CERTIFICATION OF THE DEVELOPMENT,
IMPLEMENTATION, MANAGEMENT AND ENFORCEMENT
OF AN EROSION AND SEDIMENT CONTROL PROGRAM FOR THE
CONSTRUCTION SITE STOMRATER RUN-OFF CONTROL MCM

Appendix 10 CERTIFICATION OF THE DEVELOPMENT,
IMPLEMENTATION, MANAGEMENT AND ENFORCEMENT
OF A POST-CONSTRUCTION STORMWATER RUNOFF CONTROL
PROGRAM FOR THE POST-CONSTRUCTION SITE STOMRATER
RUN-OFF CONTROL MCM

Appendix 11 CERTIFICATION OF THE DEVELOPMENT AND
IMPLEMENTATION OF A PROGRAM TO REDUCE POLLUTANT
RUN-OFF FROM MUNICIPAL OPERATIONS FOR THE MUNICIPAL
OPERATIONS POLLUTION PREVENTION AND GOOD HOUSEKEEPING MCM

APPENDIX 12

LISTING OF ACTIVE INDUSTRIAL FACILITIES

Listing of Known Industrial Facilities within Hamilton County

	<u> </u>			Primary_SIC			T	
Facility Name	Mailing Address	Mailing City	Mail ZIP	Code	Phone	Street Address	Street City	County
A J Witham Sign Production	26266 Devaney Rd	Arcadia	46030	3993	317-984-3765	26266 Devaney Rd	Arcadia	Hamilton
Advanced Metalworking Practice	401 Industrial Dr	Carmel	46032	3399	317-843-1499	401 Industrial Dr	Carmel	Hamilton
American Feeding Systems Inc	3497 Conner St	Noblesville	46060	3537	317-773-5517	3497 Conner St	Noblesville	Hamilton
Standard Locknut, INC	1045 E. 169 th St.	Westfield	46074	3452	317-867-0100	1045 E. 169 th St.	Westfield	Hamilton
Ameriflo Inc	478 Gradle Dr	Carmel	46032	3494	317-844-2019	478 Gradle Dr	Carmel	Hamilton
Apptech Inc	363 W Greyhound Pass	Carmel	46032	3571	317-844-8828	363 W Greyhound Pass	Carmel	Hamilton
Bacompt Systems Inc	12742 Hamilton Crossing Blvd	Carmel	46032	2759	317-574-7474	12742 Hamilton Crossing Blvd	Carmel	Hamilton
Ball Systems Inc	622 S Range Line Rd	Carmel	46032	3825	317-848-0205	622 S Range Line Rd	Carmel	Hamilton
Bastine Pottery Inc	16509 Cyntheanne Rd	Noblesville	46060	3263	317-776-0210	16509 Cyntheanne Rd	Noblesville	Hamilton
Bates Technologies	9059 Technology Lane	Fishers	46038	3545	317-841-2100	9059 Technology Lane	Fishers	Hamilton
Bellwether Inc	9102 Fall View Dr	Fishers	46038	2731	317-576-0790	9102 Fall View Dr	Fishers	Hamilton
Biddle Precision Components	701 S Main St	Sheridan	46069	3599	317-758-4451	701 S Main St	Sheridan	Hamilton
Builders Concrete & Supply	9170 East 131 st St	Fishers	46038	3273	317-570-6201	9170 East 131 st St	Fishers	Hamilton
Cable Concepts Inc	468 Gradle Dr	Carmel	46032	3679	317-587-1200	468 Gradle Dr	Carmel	Hamilton
McCreary Concrete Products Co	5001 E106 th St	Indianapolis	46032	3273	317-844-5157	5001 E106 th St	Carmel	Hamilton
Carmel Engineering Inc	PO Box 826	Westfield	46074	3599	317-896-9367	17650 Spring Mill Rd	Westfield	Hamilton
Carmel Signs	13815 N Meridian St	Carmel	46032	3993	317-846-6036	13815 N Meridian St	Carmel	Hamilton
Cave & Co Printing	104 W Main St	Westfield	46074	2752	317-896-5337	104 W Main St	Westfield	Hamilton
Chapdell's Tree & Plant Desig	11480 E 111th St	Fishers	46038	3999	317-845-9980	11480 E 111th St	Fishers	Hamilton
Cisco Systems Inc	11711 N Meridian St # 250	Carmel	46032	3577	317-816-5200	11711 N Meridian St # 250	Carmel	Hamilton
Cytec Industries Inc	301 E Carmel Dr Ste D100	Carmel	46032	2899	317-705-6565	301 E Carmel Dr Ste D100	Carmel	Hamilton
Dads Truck & Auto	1611 E. 226 th Street	Cicero	46034	5015	800-2996353	1611 E. 226 th Street	Cicero	Hamilton
Da Jac Inc	17152 Shadoan Way	Westfield	46074	3647	317-867-1888	17152 Shadoan Way	Westfield	Hamilton
Davis Tool & Machine Inc	19224 Eagletown Rd	Westfield	46074	3599	317-896-9278	19224 Eagletown Rd	Westfield	Hamilton
Douglas Dye & Associates Inc	501 Industrial Dr	Carmel	46032	2434	317-844-1709	501 Industrial Dr	Carmel	Hamilton
E & B Paving Inc.	12600 E. SR 38	Noblesville	46060	2951	317-773-4132	12600 E. SR 38	Noblesville	Hamilton
Express Graphics	620 S Range Line Rd	Carmel	46032	2672	317-580-9500	620 S Range Line Rd	Carmel	Hamilton
Express Manufacturing	1420 Chase Ct	Carmel	46032	3599	317-571-0990	1420 Chase Ct	Carmel	Hamilton
Fabcon LLc	17701 Springmill Rd	Westfield	46074	3272	317-896-2556	17701 Springmill Rd	Westfield	Hamilton
Federal Heath Sign LLC	11711 N College Ave # 143	Carmel	46032	3679	317-581-7790	11711 N College Ave # 143	Carmel	Hamilton
Field Rubber Products Inc	3211 Conner St	Noblesville	46060	2821	317-773-3787	3211 Conner St	Noblesville	Hamilton
Firestone Industrial Products	1700 Firestone Blvd	Noblesville	46060	3069	317-773-0650	1700 Firestone Blvd	Noblesville	Hamilton
Harlan Financial Solutions	12800 N Meridian St # 150	Carmel	46032	3578		12800 N Meridian St # 150	Carmel	Hamilton

		1		Primary SIC				
Facility Name	Mailing Address	Mailing City	Mail ZIP	Code	Phone	Street Address	Street City	County
Firestone Building Products C	525 Congressional Blvd	Carmel	46032	2952	317-575-7000	525 Congressional Blvd	Carmel	Hamilton
Frame Decor	1368 S Range Line Rd	Carmel	46032	2499	317-848-3080	1368 S Range Line Rd	Carmel	Hamilton
GW Pierce Auto	22275 US 31 N	Cicero	46034	5015	317-846-4271	22275 US 31 N	Cicero	Hamilton
Heat Recovery Systems Inc	505 Industrial Dr	Carmel	46032	3564	317-848-2745	505 Industrial Dr	Carmel	Hamilton
Bannon & Sons	17110 River Avenue	Noblesville	46062	5015	317-773-3761	17110 River Avenue	Noblesville	Hamilton
Indianapolis Metropolitan Airport	9913 Willowview Road	Fishers	46038	4581	317-849-0840	9913 Willowview Road	Fishers	Hamilton
Industrial Dieelectrics	407 S. 7 th St	Noblesville	46060	3087	317-773-1766	407 S. 7 th St	Noblesville	Hamilton
Innovative Corp	3650 E. 148 th St	Noblesville	46060	2434	317-846-2018	3650 E. 148 th St	Noblesville	Hamilton
Integrator.com	8001 E 196th St	Noblesville	46060	3823	317-776-3500	8001 E 196th St	Noblesville	Hamilton
Iris Rubber Co Inc	PO Box 737	Cicero	46034	3069	317-984-3561	10 E Jackson St	Cicero	Hamilton
Jazz It Up Screen Printing	525 Industrial Dr	Carmel	46032	2396	317-574-0066	525 Industrial Dr	Carmel	Hamilton
Juno Lighting Company	12001 Exit Five Parkway	Fishers	46037	3645	317-849-1233	12001 Exit Five Parkway	Fishers	Hamilton
Alpha Graphics	12955 Old Meridian St # 103	Carmel	46032	2752	317-844-6629	12955 Old Meridian St # 103	Carmel	Hamilton
Carmel Pro Printer	303 W Carmel Dr	Carmel	46032	2759	317-844-9171	303 W Carmel Dr	Carmel	Hamilton
King Systems Corporations	15011 Herriman Blvd.	Noblesville	46032	3089	317-776-6823	15011 Herriman Blvd.	Noblesville	Hamilton
Lusco Corporation	1295 S. 5 th St	Noblesville	46061	5093	317-773-2780	1295 S. 5 th St	Noblesville	Hamilton
LSR Trading Post	16426 SR 32	Westfield	46060	5015		16426 SR 32	Westfield	Hamilton
Maco Press Inc	PO Box 329	Carmel	46082	2796	317-846-5567	560 3rd Ave SW	Carmel	Hamilton
Magnetic Concepts Corp	611 3rd Ave SW	Carmel	46032	3993	317-580-4020	611 3rd Ave SW	Carmel	Hamilton
Mayflower Transit	9998 Michigan Road	Carmel	46032	4200		9998 Michigan Road	Carmel	Hamilton
Mecom Ltd	813 W Carmel Dr	Carmel	46032	3161	317-571-3898	813 W Carmel Dr	Carmel	Hamilton
Metal Powder Products Co	11595 N Meridian St # 510	Carmel	46032	3499	317-580-2420	11595 N Meridian St # 510	Carmel	Hamilton
Moore Services Inc	12262 Hancock St	Carmel	46032	2761	317-571-9800	12262 Hancock St	Carmel	Hamilton
Moore's Country Wood Crafting	PO Box 389	Arcadia	46030	2499	317-984-3326	115-119 W Main St	Arcadia	Hamilton
Noble Industries Inc	PO Box 578	Noblesville	46061	3441	317-773-1926	3333 Conner St	Noblesville	Hamilton
Oehler's Woods	1481 W 136th St	Carmel	46032	2511	317-848-2698	1481 W 136th St	Carmel	Hamilton
Paradigm Industries Inc	12236 Hancock St	Carmel	46032	2842	317-574-8590	12236 Hancock St	Carmel	Hamilton
Perfecto Manufacturing Inc	PO Box 539	Noblesville	46061	3231	317-773-6627	20975 Creek Rd	Noblesville	Hamilton
Porter Engineered Systems	19635 US Highway 31 N	Westfield	46074	3714	317-867-0234	19635 US Highway 31 N	Westfield	Hamilton
Quality Drapery Corp	3525A State Road 32 W	Westfield	46074	2391	317-896-2522	3525A State Road 32 W	Westfield	Hamilton
R W Pickett & Sons	1061 E 236th St	Sheridan	46069	2087	317-758-4331	1061 E 236th St	Sheridan	Hamilton
Reeder & Kline Machine Co Inc	340 1st Ave SW	Carmel	46032	3599	317-846-6591	340 1st Ave SW	Carmel	Hamilton
Regal Printing Inc	485 Gradle Dr	Carmel	46032	2752	317-844-1723	485 Gradle Dr	Carmel	Hamilton
RFC Franchising LLC	12400 N Meridian St # 190	Carmel	46032	2026	317-819-0700	12400 N Meridian St # 190	Carmel	Hamilton
Ritron Inc	PO Box 1998	Carmel	46082	3669	317-846-1201	505 W Carmel Dr	Carmel	Hamilton

				Primary_SIC				
Facility Name	Mailing Address	Mailing City	Mail ZIP	Code	Phone	Street Address	Street City	County
Rough Notes Co Inc	PO Box 1990	Carmel	46082	2731	317-582-1600	11690 Technology Dr	Carmel	Hamilton
Schaefer Powder Coating	4518 W. 99 th Street	Carmel	46032	3479	317-228-9987	4518 W. 99 th Street	Carmel	Hamilton
Scott's Hyponex Facility	2695 Cicero Road	Noblesville	46060	2875	317-773-5586	2695 Cicero Road	Noblesville	Hamilton
SePRO Corp	11550 N Meridian St # 600	Carmel	46032	2879	317-580-8282	11550 N Meridian St # 600	Carmel	Hamilton
Shelf Tag Supply Corp	611 3rd Ave SW	Carmel	46032	2679	317-580-4030	611 3rd Ave SW	Carmel	Hamilton
Sheridan Manufacturing Co Inc	508 S Main St	Sheridan	46069	3599	317-758-6000	508 S Main St	Sheridan	Hamilton
Shi Ru Originals	3481 Sugar Loaf Ct	Carmel	46033	2335	317-848-1091	3481 Sugar Loaf Ct	Carmel	Hamilton
South Side Ready Mix	17050 River Ave	Noblesville	46062	3273		17050 River Ave	Noblesville	Hamilton
Standard Locknut Inc	1045 E. 169 th St	Westfield	46074	3452	317-867-0100	1045 E. 169 th St	Westfield	Hamilton
Strawtown Pottery & Antiques	12738 Strawtown Ave	Noblesville	46060	3269	317-984-5080	12738 Strawtown Ave	Noblesville	Hamilton
Telamon Corp	1000 E 116th St	Carmel	46032	3661	317-818-6888	1000 E 116th St	Carmel	Hamilton
T-Metal Works Inc	PO Box 1383	Carmel	46082	3444	317-848-2936	415 Industrial Dr	Carmel	Hamilton
Waste Management of Hamilton								
County	11735 SR 238	Noblesville	46060	4953	317-773-2635			Hamilton
UN Printing & Mailing Inc	1429 Chase Ct	Carmel	46032	2752	317-844-8622	1429 Chase Ct	Carmel	Hamilton
Uniform Hood Lace Inc	PO Box 364	Westfield	46074	2399	317-896-9555	18881 US Highway 31 N	Westfield	Hamilton
US Aggregates	16760 River Rd	Noblesville	46060	1442	317-773-6811	16760 River Rd	Noblesville	Hamilton
Truss Manufacturing	17350 US 31 N	Westfield	46074	2439	317-896-2571			Hamilton
Vibcon Corp	PO Box 542	Arcadia	46030	3569	317-984-3543	6660 E 266th St	Arcadia	Hamilton
Voege Precision Mch Pdts LLC	17808 Commerce Dr	Westfield	46074	3548	317-867-4699	17808 Commerce Dr	Westfield	Hamilton
Weas Engineering Inc	PO Box 550	Westfield	46074	2899	317-867-4477	17819 Commerce Dr	Westfield	Hamilton